# A.R.M. LOXAHATCHEE NATIONAL WILDLIFE REFUGE

## ENHANCED WATER QUALITY PROGRAM

## 10TH ANNUAL REPORT
## CALENDAR YEAR 2013

LOXA14-002

**June 2014**

**ACKNOWLEDGMENTS**

The authors thank the following contributors, without whom this report would not have been possible: Marcie Kapsch, Rebekah Gibble, Melissa Better, Ryan Huggins, Darren Pecora, and Christen Mason for water quality sample collection and sonde deployments and collections; SFWMD and Columbia Analytical Services for water chemistry analyses; and SFWMD for the use of DBHYDRO for data availability. Laura Brandt and Mark Musaus provided valuable contributions to the initial phase of this overall program. Finally, we thank Refuge Manager Sylvia Pelizza and Deputy Manager Rolf Olson for their continued support and leadership throughout this project. Funds to conduct the expanded monitoring network at A.R.M. Loxahatchee NWR were provided by the U.S. Congress in P.L. 108-108, the Department of the Interior and Environment Appropriations Act of 2004. Funding for 2013 was obtained, in part, from the Everglades National Park through the DOI Critical Ecosystem Studies Initiative program. The findings and conclusions in this report are those of the authors and do not necessarily represent the views of the U.S. Fish and Wildlife Service or the National Park Service.

This report should be cited as:
USFWS, 2014. A.R.M. Loxahatchee National Wildlife Refuge - Enhanced Water Quality Program – 10th Annual Report for calendar year 2013 – June 2014. LOXA14-002, U.S. Fish and Wildlife Service, Boynton Beach, FL. 71 pp.

## ACRONYMS AND ABBREVIATIONS

**ACME** Special Drainage District, Village of Wellington
**acre-ft** acre-feet (volume reported as one acre in area by one foot in depth)
**cfs** cubic feet per second
**Cl** chloride
**cm** centimeter
**DBHYDRO** SFWMD's web portal for water quality data
**DCS** depth from water surface to consolidated substrate
**DOI** US Department of Interior
**EVPA** Federal Consent Decree compliance sampling network for Refuge
**ft** feet
**FWM** flow-weighted mean
**km** kilometer
**L** liter
**LOXA** Refuge's expanded water quality monitoring network
**m** meter
**mg** milligram
**NGVD** National Geodetic Vertical Datum
**$NO_x$** total concentration as nitrogen of oxides of nitrogen, $NO_2 + NO_3$
**Refuge** A.R.M. Loxahatchee National Wildlife Refuge
**s** second
**SFWMD** South Florida Water Management District
**$SO_4$** sulfate
**STA** Stormwater Treatment Area
**Tdepth** depth of clear water column
**TN** total nitrogen
**TP** total phosphorus
**µg** microgram
**µS $cm^{-1}$** microSiemens per centimeter (measure of conductivity)
**USACE** U.S. Army Corps of Engineers
**USFWS** U.S. Fish and Wildlife Service
**USGS** U.S. Geological Survey
**WCA** Water Conservation Area

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## EXECUTIVE SUMMARY

Congress appropriated funds to the U.S. Fish and Wildlife Service in 2004 which funded an enhanced water quality monitoring network and hydrodynamic and water quality models to improve the scientific understanding of water quality in the Arthur R. Marshall Loxahatchee National Wildlife Refuge[1] (Refuge). The network and models provide information that is used in management decisions to better protect Refuge resources. The enhanced water quality monitoring network complements the compliance network monitored as a part of the 1992 Federal Consent Decree (Case No. 88-1886-CIV-MORENO) by characterizing the water quality of a larger Refuge area, particularly the fringe area potentially impacted by canal water intrusions. Monthly grab samples have been collected at 37 to 39 stations located in the marsh and canal since June 2004. The number of grab sample stations has reduced to 36 because three stations located near the canal were overrun with cattail making them inaccessible. Additionally, continuous measurements of conductivity have been collected along seven transects, four of which extend from surface water discharge points in the canal into the interior. This report is the tenth annual report, with analyses focused on January through December 2013, and with comparisons made to the preceding years (2004 through 2012).

Water quality data (particularly total phosphorus) and analyses of canal water intrusion into the Refuge marsh presented in this report document continued intrusion of rim canal water into the Refuge interior, adding to a growing information base about canal water impacts to the Refuge. Intrusion of nutrient-rich and high conductivity water from the canal network surrounding the Refuge has been shown to negatively impact Refuge flora and fauna. Important insights gained from 2013 canal water intrusion analyses include:

- Canal water intruded into the marsh up to 3 km following rewetting of the system with rainfall and high rate inflows.
- Rainfall total in 2013 for the Refuge and contributing basins was higher than the historic average (1963 through 2012).
- Intrusion of canal water into the marsh was greatest in June 2013 and is related to a rapid canal stage increase and high inflow rates from the stormwater treatment areas (STA). Phosphorus concentrations in STA discharges were higher than desired through most of the year and the southernmost cell of STA-1E was impaired by an infestation of apple snails, which defoliated large expanses of the vegetation communities in this cell. In June 2013, canal and perimeter phosphorus concentrations peaked well above the 10 ppb threshold for maintaining a balance in flora and fauna in the Refuge.

Analyses of these data continue to support previously suggested management practices that have the potential to minimize intrusion. This year, the Refuge achieved the high stage performance measure (PM) which calls for water stage above 16.4 ft for more than 4 weeks in 4

[1] Public Law 108-108; see House Report No. 108-195, p. 39-41 (2004)

of 5 years. This year makes two consecutive years that the PM was met. The PM is designed to provide ecological conditions that promote replenishment of the fish prey-based populations following low water years and establishment of hydrologic conditions conducive for promoting water stage recessions that concentrate the fish prey-based population during wading bird fledging season. A few recommendations with regards to reducing canal water intrusion are summarized as balancing inflow and outflow volumes, reducing the duration of inflows, and reducing inflow rates when the canal stage is lower than the marsh stage.

Based on the surface water conductivity data, the Refuge was classified into four geographic zones: (1) Canal Zone; (2) Perimeter Zone, located from the canal to 2.5 km (1.6 miles) into the marsh; (3) Transition Zone, located from 2.5 km (1.6 miles) to 4.5 km (2.8 miles) into the marsh; and (4) Interior Zone, greater than 4.5 km (2.8 miles) into the marsh. Overall, water quality conditions in the Perimeter continue to be different from, and more impacted than, the Interior Zone. Cattail expansion in the Refuge marsh, negative impacts to periphyton and *Xyris* spp. in response to nutrient and mineral enrichment, and displacement of sawgrass in the canal water-exposed areas of the marsh are a few examples of marsh impacts.

This report continues to document that water movement between the canals and the marsh is influenced by rainfall, structure-controlled water inflow and outflow into and from the perimeter canal, the difference between canal and marsh stages, and marsh elevation. When combined with our understanding of canal water intrusion's influence on the marsh, these data continue to suggest that high-nutrient water is having a negative impact on the Refuge marsh (e.g., enriched soil TP, displacement of sawgrass by cattails, loss of *Xyris* spp., etc.).

## ANNUAL PROGRAM SUMMARY

The objective of this section is to provide a general descriptive summary of environmental conditions, canal water intrusion into the Refuge marsh (movement of water from the perimeter canal into the marsh interior), and associated water quality in the Refuge from January through December 2013 following approaches presented in previous annual reports (USFWS 2007a, b; USFWS 2009; USFWS 2010a, b; USFWS 2012a, b, USFWS 2013). Further, we compare results, particularly total phosphorus (TP), in 2013 to results presented in previous water quality reports covering the period from January 2004 through December 2012 (Harwell et al. 2005; USFWS 2007a, b; USFWS 2009; USFWS 2010a, b, USFWS 2012a, b, USFWS 2013). Thus, this section serves as an update to the 2012 annual report (USFWS 2013) and briefly characterizes environmental conditions (e.g., rainfall, canal flows, marsh and canal stages, and water quality) associated with events of canal water intrusion into the marsh and water quality conditions during 2013.

### Background

Prior to June 2004, water quality in the Refuge interior was monitored primarily using the 1992 Federal Consent Decree (Case No. 88-1886-CIV-MORENO) compliance network (EVPA). These 14 stations (**Figure 1**), monitored since 1978, characterize the central region of the interior marsh, leaving a relatively large region uncharacterized, predominantly in the outer, impacted fringe of the wetland (Harwell et al. 2005; USFWS 2007a, b; USFWS 2009; USFWS 2010a, b, USFWS 2012a, b, USFWS 2013). In June 2004, the Refuge initiated an enhanced water quality monitoring network (LOXA) intended to improve the scientific understanding of water movement in and out of the Refuge marsh, water quality in the marsh, and to provide information that can be incorporated into water management decisions to better protect Refuge resources (Brandt et al. 2004). The enhanced monthly sampling focuses on areas near surface water discharge stations in areas uncharacterized by the EVPA network (**Figure 1**).

Water delivered to the Refuge originates as direct rainfall and canal water discharges from the surrounding basins. Stormwater treatment areas (STA) 1W and 1E treat the majority of water delivered to the Refuge via canals. Canal discharges are driven by rainfall in the surrounding basins, with a large volume delivered to the Refuge from the L-8 and S-5A basin (Burns and McDonnell Engineering Co, Inc. 2005). The L-8 basin discharges are generally a mixture of water from Lake Okeechobee and the S-5A and C-51 basins (Gary Goforth, Inc. 2008). The STA-1E water control plan indicates that during this interim period (through 2015), water discharges to tide (east coast – Lake Worth Lagoon) should approach 150,000 acre-ft, while the remainder of the water should be treated and distributed throughout the Everglades Protection Area (Refuge south to Florida Bay). Stormwater Treatment Areas 1W (180,000 acre-ft annually capacity) and 1E (165,000 acre-ft annually capacity) are to treat some of this water (Gary Goforth, Inc. 2008).

Water levels in the Refuge are managed by U.S. Army Corps of Engineers (USACE) based on the 1995 Water Regulation Schedule (USFWS 2000; USFWS 2007a, b; **Figure 2**). Inflows to the Refuge from the STAs or as bypass around the STAs are controlled by the South Florida Water Management District (SFWMD), while discharges from the Refuge are controlled by USACE. Since 2009, staff from the Refuge has held weekly calls with USACE to provide input on timing and volumes of discharges from the Refuge.

**Methods**

*Environmental Conditions.* Rainfall, flow, stage, and additional water quality data were downloaded from the South Florida Water Management District (SFWMD) data web portal, DBHYDRO and data were current as of June 11, 2014 (http://my.sfwmd.gov/portal/page?_pageid=2235,4688582&_dad=portal&_schema=PORTAL). All stage data presented in this report are relative to the NGVD 1929 datum. Data from the USGS 1-7 stage gage (**Figure 1**) were used as estimates of marsh stage values; canal stage data from the headwater gage of the G-94C outflow spillway structure (**Figure 1**) were used for continuity with previous reports. These data were also used to assess the number of days the canal and marsh stages were greater than 17 ft in any year, with 21 to 28 days being optimal for providing desired stages going into the dry season for proper recession and adequate water for hatchling foraging. Refuge inflow and outflow were aggregated as the total daily average flow. Inflow records for ACME-1, ACME-2, G-310, G-251, S-362, G-300, and G-301 were used for daily average inflow into the canals; outflow records at G-300, G-301, G-94A, G-94B, G-94C, S-10A, S-10C, S-10D, and S-39 were used for daily average outflow out of the canals (**Figure 1**). Data from G-338 also were considered, but the discharges were sparse and not included in these analyses. Daily rainfall data were averaged from the LOXWS, S-6, S-39, and S-5A weather stations to represent Refuge rainfall (**Figure 1**). Rainfall for the C-51 is represented by S-5A and WPB AIRP, and Pahokee1 and Pahokee2 represent rainfall for the S5A basins. Flows to the east of the Refuge from the S-5A, C-51, and L-8 basins are represented by pump structure S-155A.

*Intrusion Monitoring.* Conductivity acts as a conservative tracer of canal water; there are no biological or chemical processes in the surface water that significantly alter conductivity. Thus, these data can be used to track canal water intrusion into the marsh, which ultimately can be examined in relationship to water management operations. We determined the spatial and temporal extent of high conductivity canal water intrusion into the Refuge under different hydrologic conditions with emphasis on six of the seven Refuge conductivity transects (**Figure 1**), where temperature-compensated conductivity is collected hourly using conductivity data loggers. Also, we related changes in the extent of intrusion to water management activities affecting canal stages and flows into the Refuge, and determined the influence of natural meteorological events and hydrologic mechanisms on intrusion of high conductivity canal water.

We used the six conductivity transects to track water movement between the canal and the first six kilometers of the marsh (**Figure 1**). Two transects (STA-1E and STA-1W) were established near the outflow of STA-1W and STA-1E discharge structures. Two of the remaining transects (ACME-2 and Southeast) were established on the east side of the Refuge south of the

STA-1E discharge structure. We established the Southeast (SE) transect late in July 2007 to capture canal water intrusion in areas not previously characterized. The final two transects (S-6 and Extreme Southwest) were established on the west side of the Refuge south of the STA-1W discharge structure. The Extreme Southwest (ESW) transect also was established late in July 2007 to capture canal water intrusion signals in areas previously not characterized.

Seventy-five percent of canal monthly conductivity values were greater than 566 $\mu S\ cm^{-1}$ and the maximum was 1,278 $\mu S\ cm^{-1}$. Monthly Interior Zone conductivity levels remained below 215 $\mu S\ cm^{-1}$ through 2013. Given this difference in conductivity between the canal and the interior marsh, we use two conductivity levels, 350 and 500 $\mu S\ cm^{-1}$, to help identify the distance into the interior marsh that canal water penetrated. Tracking was done using isopleths of conductivity generated from the hourly conductivity data. Isopleths are lines connecting points of equal value for a given metric. Elevation contours on a topographic map are examples of isopleths.

The two isopleths (350 and 500 $\mu S\ cm^{-1}$) were chosen to sufficiently cover the conductivity gradient observed from the canal into the marsh. Further, laboratory and field studies have shown that high conductivity waters (>300 $\mu S\ cm^{-1}$) have adverse impacts on the ecosystem community structure (e.g., reduced growth rate of *Xyris* spp. (McCormick and Crawford 2006), shifts from sawgrass to cattail communities (Richardson 2010), altered periphyton community structure (Sklar et al. 2005).

*Marsh Total Phosphorus.* As in past years, monthly water quality samples were collected from the EVPA and LOXA monitoring networks (**Figure 1**). The EVPA network consists of 14 interior marsh stations collected cooperatively with the SFWMD and Refuge staff. Refuge staff solely-collect water samples from the 37 stations (five in the canal and 32 in the marsh) in the LOXA network. The number of grab sample stations has reduced from 39 to 37 since the program's inception because two stations located near the canal were overrun with cattail, making them inaccessible for water quality sampling. Samples for both networks generally are analyzed for more than 20 water quality parameters. Sample collection is confounded by water depth and sample station accessibility. When clear water depths are between 10 and 20 cm (3.9 and 7.9 inches), only partial samples are collected and analyzed for 6 of the 29 water quality parameters, including: TP, chloride, sulfate, temperature, depth, and specific conductance. When the clear water depths are below 10 cm (3.9 inches), no samples are collected and no data are recorded. This report only presents TP data. **Appendix A** presents summary statistics for all water quality parameters measured in the LOXA network.

*Water Quality Zones*. The Refuge interior was classified into several geographic zones based upon conductivity data variability and changes in median conductivity as a function of distance from the perimeter canal as presented in USFWS 2007a, b; 2009; 2010a, b, USFWS 2012a, b, USFWS 2013. For the analyses presented here, the following zones were identified:

- Canal: stations located in the canal

- Perimeter: stations located from the canal to 2.5 km (1.6 miles) into the marsh
- Transition: stations located from 2.5 km to 4.5 km (1.6 to 2.8 miles) into the marsh
- Interior: stations located greater than 4.5 km (2.8 miles) into the marsh

Water quality stations associated with each zone are presented in Appendix B – **Table B-1**.

**Results**

*Environmental Conditions: S-5A and C-51 Basins.* The 2013 S-5A (716,340 acre-ft) and C-51 (670,440 acre-ft) basin rainfall volumes were slightly higher than their historic averages since 1963 (681,229 and 670,440 acre-ft, respectively – **Figure 3a**). Consistent with previous years, wet season rainfall for S-5A (423,480 acre-ft) and C-51 (400,600 acre-ft) was greater than dry season (292,860 and 269,840 acre-ft, respectively – **Figure 3b**) rainfall. Rainfall in the S-5A and C-51 basins is a primary driver of inflows to the Refuge.

Flows through the S-155A structure and inflows to STA-1E operate in concert. Discharges to the east coast via S-155A have a guideline limit of 150,000 acre-ft $yr^{-1}$. In 2013, the volume of water discharged through S-155A was approximately 362,095 acre-ft, 83% higher than expected during normal operations. Inflow to STA-1E (65,784 acre-ft - **Figure 5a**) was lower than the treatment target of 165,000 acre-ft $yr^{-1}$ (Gary Goforth, Inc. 2008) in 2013, similar to most of the preceding years since 2004. Inflow to STA-1W (275,665 acre-ft – Figure 5b) was greater than the treatment target of 180,000 acre-ft $yr^{-1}$. Inflow volumes to STA-1E and STA-1W were substantially lower than maximum annual treatment capacities of 304,993 and 329,169 acre-ft $yr^{-1}$, respectively (Germain 2013).

*Environmental Conditions and Canal Water Intrusion: Refuge*. Rainfall on the Refuge in 2013 was approximately 668,870 acre-ft (**Figure 6a**), with dry and wet season rainfall contributing 36% and 64% of total rainfall (**Figure 6b**). Rainfall on the Refuge was slightly higher than historic rainfall average since 1963 (625,577 acre-ft). Refuge canal total annual inflow in 2013 (367,220 acre-ft) was 19% higher than average (304,269 acre-ft) since 2004 (**Figure 6c**). In 2013, dry season (57,321 acre-ft) inflow was lower than average dry season flow (62,406 acre-ft) since 2004, while wet season (309,899 acre-ft) inflow was higher than annual wet season inflows (233,409 acre-ft). Mean canal (16.53 ft) and marsh (16.26 ft) stage in 2013 were higher than historic annual averages (16.39 and 16.05 ft, respectively) since 2004 (Table 3).

Daily inflow to the Refuge peaked several times throughout 2013 (**Figure 7a and 8a)**. Continuing from December 2012, water stages in the canal and marsh declined through March 2013, when stages began leveling off in the marsh, but continued to decline in the canal through mid-May. From June through September, stages in the marsh increased and plateaued at around 16.75 ft, while the canal stage fluctuated by more than a foot several times. By mid-October, stage in the canal peaked around 16.87 feet, after which stage in the marsh and canal began to recede through December. Because of the rainfall and inflows, the Refuge achieved the high stage performance measure (PM) this year (**Figure 9**). The high stage PM requires Refuge stage to increase above 16.4 ft for more than 4 weeks in a year 4 of 5 years. This year makes the second consecutive year that the PM was met. Because of failures to meet the PM

in 2011, the high stages this year were necessary to promote fish prey-based population recovery. To meet the multi-year aspect of the PM (4 of 5 years), the stage in the Refuge will need to reach desired levels again in 2014 as the target was met in 2010.

The stage ascension in the marsh and canal were mostly driven by rainfall and inflow pulses from the STAs. Canal water intrusion into the marsh increased to 3 km during June 2013, while the marsh was being reflooded and canal and marsh stages increased rapidly. Inflow rates during June 2013 exceeded 7,000 cfs, and this level of intrusion resulted regardless of marsh stages being higher than canal stages. (**Figure 10**). Outflows beginning in mid-June 2013 and continuing through mid-July 2013 resulted in a drawdown of the canal and reduction in canal water intrusion, but rainfall and inflows allowed marsh stage to remain above 16.5 ft through September when canal and marsh stages temporarily receded. Continuous rainfall and inflows resulted in increased canal and marsh stages again in October, and canal water intruded up to 2.2 km into the marsh.

*Total Phosphorus and Intrusion Dynamics*. Monthly flow-weighted mean TP concentration discharged to the Refuge from STA-1E and STA-1W in 2013 ranged from 20 to 98 ppb, while canal concentration ranged from 20 to 104 ppb (**Figure 10a**). The poor performance of STA-1E is likely associated with an infestation of apple snails in the southernmost cell, which defoliated much of the aquatic vegetation, limiting the treatment capacity of the system (Unsell 2014). Canal TP concentrations peaked in June (104 ppb) following the onset of rainfall and inflows coming out of the dry season. Consistent with Canal TP peaks, Perimeter Zone TP concentrations peaked to 37 ppb during June and ranged 7 to 31 ppb. Total phosphorus concentrations in the Transition and Interior Zones remained below 10 ppb over the entire year (**Figure 10b**).

**Discussion**

Since the initiation of the enhanced water quality monitoring and modeling program, the 2013 environmental conditions for the Refuge and contributing basins represent a year with above average rainfall for the system. These conditions led to the Refuge meeting the high stage PM target established to promote ecological benefits for the second year in a row, resulting in three of the last four years achieving the stage target. To meet the long-term high stage PM, the stage target must be met at least 4 of 5 years, so meeting the target this year should promote recovery of the fish prey-base for foraging birds in the Refuge. Because the Refuge failed to meet the target in 2011, a drought year, it was necessary for the Refuge to meet the target this year and will be important to meet it again next year to achieve the long-term PM objective.

Rehydration of the marsh during June resulted in substantial intrusion into the marsh. This June 2013 intrusion event occurred regardless of the fact that canal stage did not exceed marsh stage during the period. Similar to previous years on record, the intrusion event was driven mostly by high and continuous inflow rates and antecedent rainfall.

Previous annual reports for the Refuge (Harwell et al. 2005; USFWS 2007a, b; USFWS 2009; USFWS 2010a, b, USFWS 2012a, b, USFWS 2013) have presented water management suggestions, including dry-down frequencies and minimization of canal water intrusion. Some of those suggestions focused on controlling inflows and outflows to minimize canal water intrusion into the marsh. In the 2005, 2006, 2007, 2008, 2009, 2010, 2011, and 2012 annual reports, we suggested that if canal water inflows were necessary, the inflow rate should be below 200 cfs and for a short duration (< five days). Alternatively, if high inflows were necessary and canal and marsh stages were greater than the marsh sediment elevation, then outflows should be timed to inflows and be greater than inflows. The recommended timing, volume, or duration of outflows with respect to inflows was not extensively observed in 2013. Failure to apply this guidance in 2013 resulted in substantial intrusion in June and through September and October. Because of findings this and previous years, we continue to support the water management recommendation to reduce canal water intrusion as characterized here and in previous reports (USFWS 2007a, b; USFWS 2009; USFWS 2010a, b; USFWS 2012a, b, USFWS 2013). Some of these management recommendations include (**Table 5**):

- Refuge inflows should be short duration (≤ 5 days) pulses of < 200 cfs (6 $m^3 s^{-1}$) when absolute canal/marsh stage difference is < 0.2 ft (< 0.1 m) and interior water depths are < 0.5 ft (< 0.2 m).

- Refuge inflow rates can be moderate (200 to 400 cfs; 6 to 11 $m^3 s^{-1}$) for short durations if marsh stage is > 0.6 ft (> 0.2 m) higher than canal stage and waters depths are < 0.3 ft (< 0.1 m).

- If Refuge inflows must be extended beyond short-duration pulses at high volumes and there is nowhere else to send water during these inflows, outflow should occur as soon as possible to moderate the extent of intrusion.

We have presented our recommendations at several forums to water managers and the various agencies responsible for making water management decisions. These forums include direct communication from Refuge managers, Refuge specific weekly water coordination meeting with the USACE, quarterly regional water coordination meetings, and periodic calls with the Corps of Engineers. The quarterly water coordination meetings focus on water management for the northern portion of the Everglades (from Lake Okeechobee down to Water Conservation Area 2) and consist of multiple agencies (e.g., U.S. Fish and Wildlife Service, National Park Service, Corps of Engineers, Lake Worth Drainage District, Florida Fish and Wildlife Conservation Commission, South Florida Water Management District). Periodic calls with the Corps of Engineers focus on water management under the various water regulation schedules for each of the Water Conservation Areas.

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**Table 1.** Mean, 25th and 75th percentiles, and number of days marsh (1-7) and canal (G94C) stage are greater than or equal to 17 ft.

| | Mean | | 25th Percntile | | 75th Percntile | | Days >= 17 ft | |
|---|---|---|---|---|---|---|---|---|
| | 1-7 | G-94C | 1-7 | G-94C | 1-7 | G-94C | 1-7 | G-94C |
| Year | ft | ft | ft | ft | ft | ft | days | days |
| 2004 | 16.37 | 15.51 | 16.04 | 14.94 | 16.68 | 16.57 | 21 | 17 |
| 2005 | 16.30 | 16.09 | 16.12 | 15.71 | 16.46 | 16.36 | 0 | 0 |
| 2006 | 16.32 | 16.17 | 16.08 | 15.82 | 16.57 | 16.58 | 14 | 17 |
| 2007 | 16.35 | 15.83 | 15.96 | 14.92 | 16.81 | 16.83 | 53 | 54 |
| 2008 | 16.68 | 16.46 | 16.49 | 16.21 | 16.92 | 16.89 | 65 | 62 |
| 2009 | 16.35 | 16.03 | 16.16 | 15.71 | 16.59 | 16.54 | 0 | 0 |
| 2010 | 16.62 | 16.39 | 16.52 | 16.05 | 16.71 | 16.71 | 0 | 7 |
| 2011 | 15.83 | 15.36 | 15.67 | 14.50 | 16.29 | 16.18 | 0 | 0 |
| 2012 | 16.54 | 16.36 | 16.21 | 15.91 | 16.88 | 16.88 | 82 | 81 |
| 2013 | 16.53 | 16.26 | 16.39 | 16.03 | 16.67 | 16.53 | 0 | 0 |

**Table 2**. Evolution of water management recommendation based on water quality analysis since 2004.

| Recommendation |
|---|
| Refuge inflows should be short duration (≤ 5 days) pulses of < 5655 L $s^{-1}$ (< 200 cfs) when absolute canal/marsh stage difference is < 0.1 (< 0.2 ft) and interior water depths are < 0.2 (< 0.5 ft). |
| Refuge inflow rates can be moderate 5655 t 11,310 L $s^{-1}$ (200 t 400 cfs) for short durations if marsh stage is > 0.2 (> 0.6 ft) higher than canal stage by and waters depths are < 0.1 (< 0.3 ft). |
| Refuge inflows should be discontinued when the canal stage is > 0.1 (> 0.2 ft) higher than marsh stage, unless the rainfall or outflow volumes are 3 t 4-times higher than the inflows. |
| Refuge inflows should be discontinued when the canal stage is > 0.2 ft (> 0.1 m) higher than marsh stage, unless the rainfall or outflow volumes are equal t or greater than inflows. |
| If Refuge inflows must be extended beyond short-duration pulses, outflow should be greater than inflow and last several days longer. |
| If Refuge inflows must be extended beyond short-duration pulses, outflow should be equal t or greater than inflow and last several days longer. |
| If Refuge inflows must be maintained at high rates, the S-10s and S-39 should be opened t create outflow 3 or 4-times higher than inflow. |
| If Refuge inflows must be maintained at high rates, the S-10s and S-39 should be opened in conjunction with canal inflows t create outflow equal t higher than inflow. |
| If Refuge inflows must be extended beyond short-duration pulses at high volumes and there is nowhere t send water during these inflows, outflow should proceed as soon as practicable t moderate the extent of intrusion the marsh receives from the original inflows. |

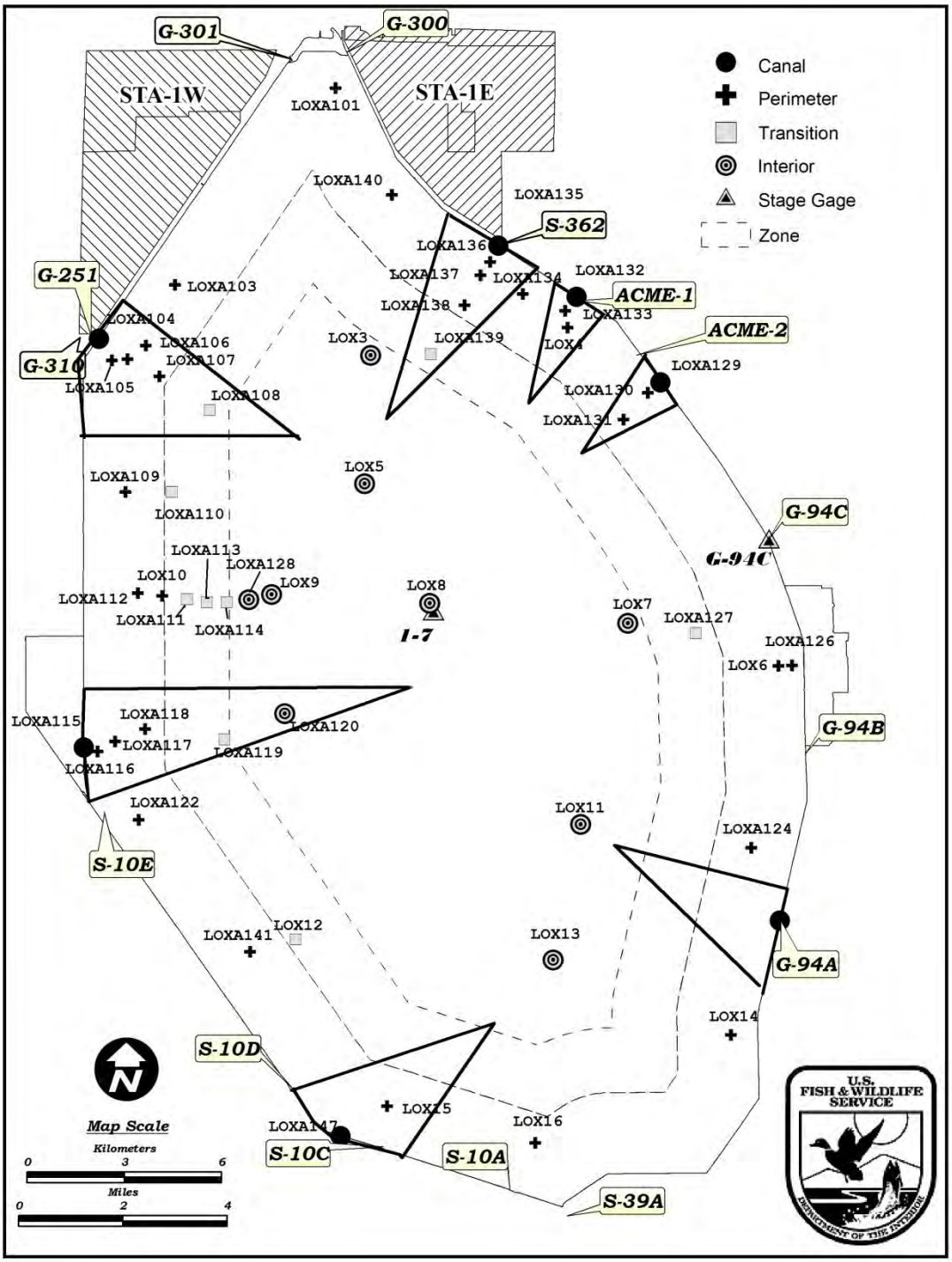
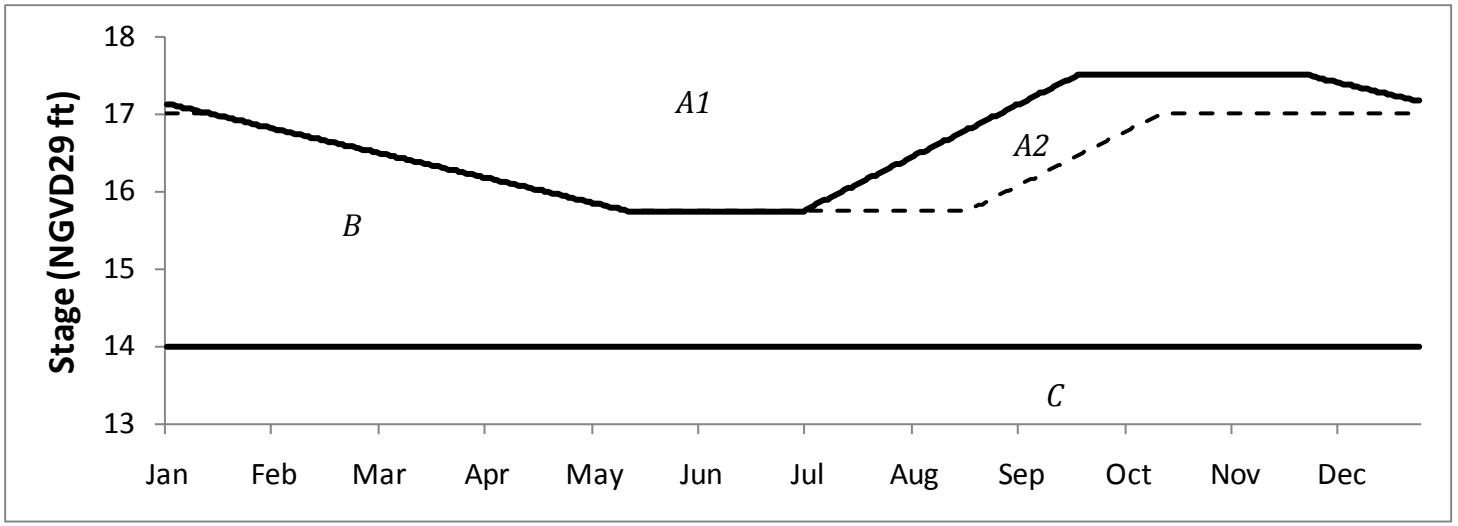



**Figure 1**. LOXA (LOXA###) and EVPA (LOX#) water quality monitoring stations, inflow and outflow structures, and canal and marsh stage gages used in this report. Solid polygons delineate transects, dashed polygons represent marsh zones.




| DATES | USE GAGE | CONDITIONS |
|---|---|---|
| 1 Jan - 30 Jun | 1-8 Canal | All |
| 1 Jul - 31 Dec | 1-8 Canal | Except as noted below |
| | Avg. 1-7, 1-8T, 1-9 | During rising stage when canal stage exceeds average. |

| ZONE | RELEASES |
|---|---|
| A1 | Up to maximum at S-10 (and S-39 when agreed between Corp and SFWMD). Water supply releases as needed. |
| A2 | S-10 releases based on Corps forecasts. Water supply releases as needed. If Lake Okeechobee stage is above WCA-1 stage or no more than one foot below WCA-1 stage, then water supply release from WCA-1 must be preceeded by an equivalent volume of inflow. |
| B | Water supply is needed. If Lake Okeechobee stage is above WCA-1 stage or no more than one foot below WCA-1 stage, then water supply releases from WCA-1 must be preceeded by an equivalent volume of inflow. |
| C | No net releases from WCA-1. Any water supply releases must be preceeded by an equivalent volume of inflow. |

**Figure 2.** Water Regulation Schedule for the Arthur R. Marshall Loxahatchee National Wildlife Refuge (USACE 1994).

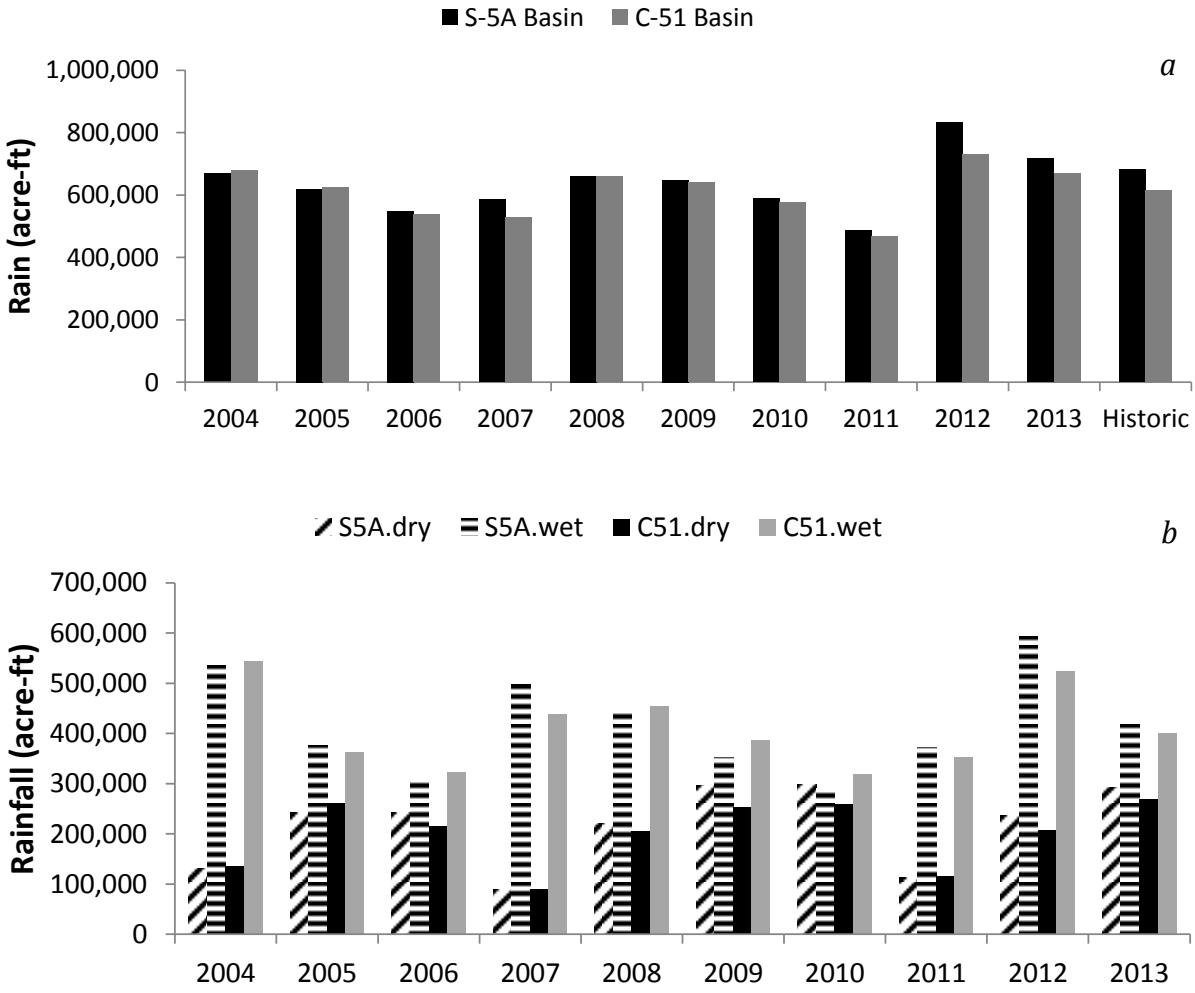



**Figure 3**. (*a*) Total annual and (*b*) dry and wet season rainfall for the S-5A and C-51 basins. Historic rainfall was determined from 1963 through 2013.

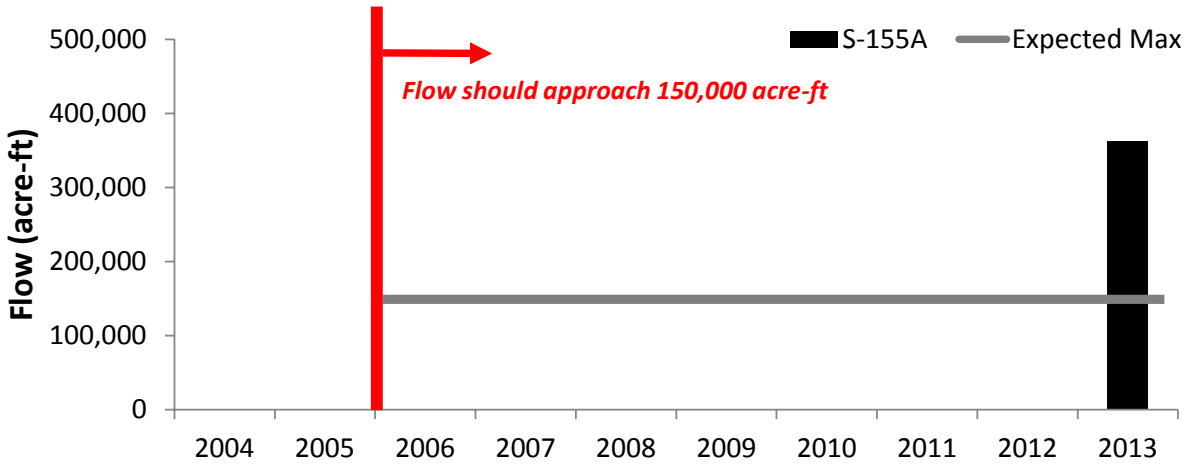



**Figure 4**. Total annual flows through the S-155A structure. The red vertical bar represents the period when flows through S-155A should approach 150,000 acre-ft as a mixture of L-8 and C-51 basin runoff (Gary Goforth, Inc. 2008). The horizontal grey bar represents the expected maximum (150,000 acre-ft) through S-155A.

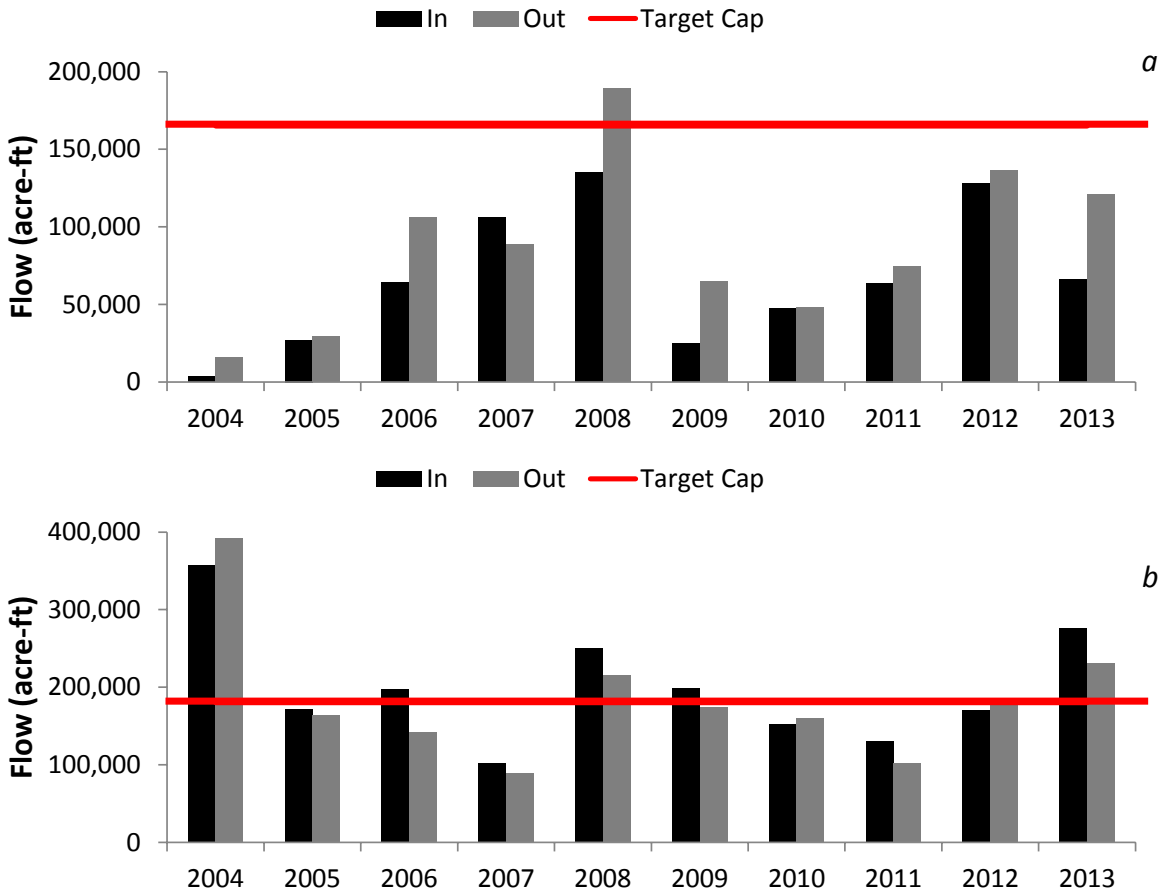



**Figure 5**. (a) STA-1E and (b) STA-1W annual inflow and outflow volumes. Horizontal red lines represent target treatment capacities for STA-1E (165,000 acre-ft) and STA-1W (180,000 acre-ft; Gary Goforth, Inc. 2008).

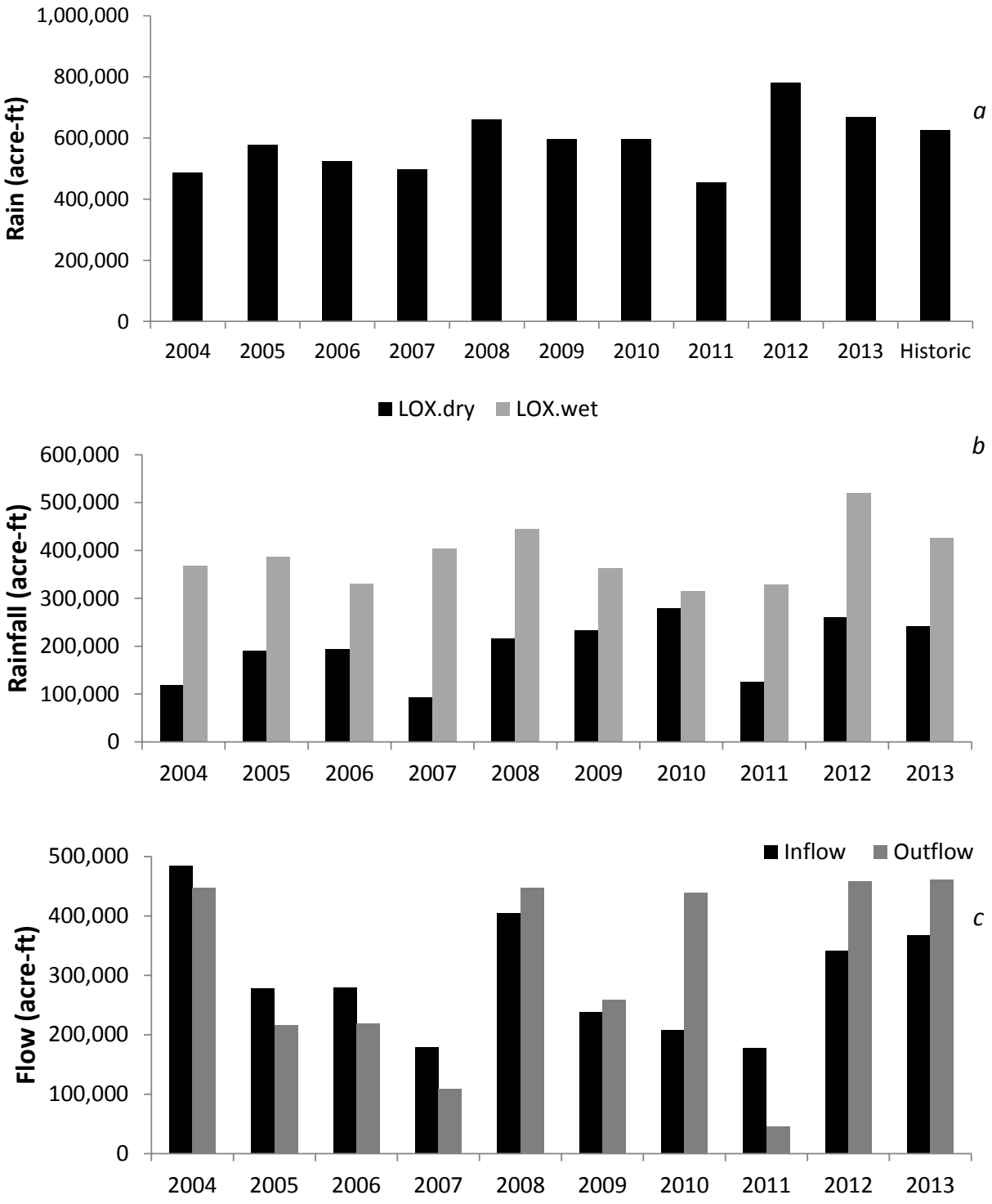



**Figure 6**. (*a*) Total annual rainfall, (*b*) total dry and wet season rainfall, and (*c*) inflow and outflow for the Refuge. Historic rainfall was determined from 1963 through 2013.

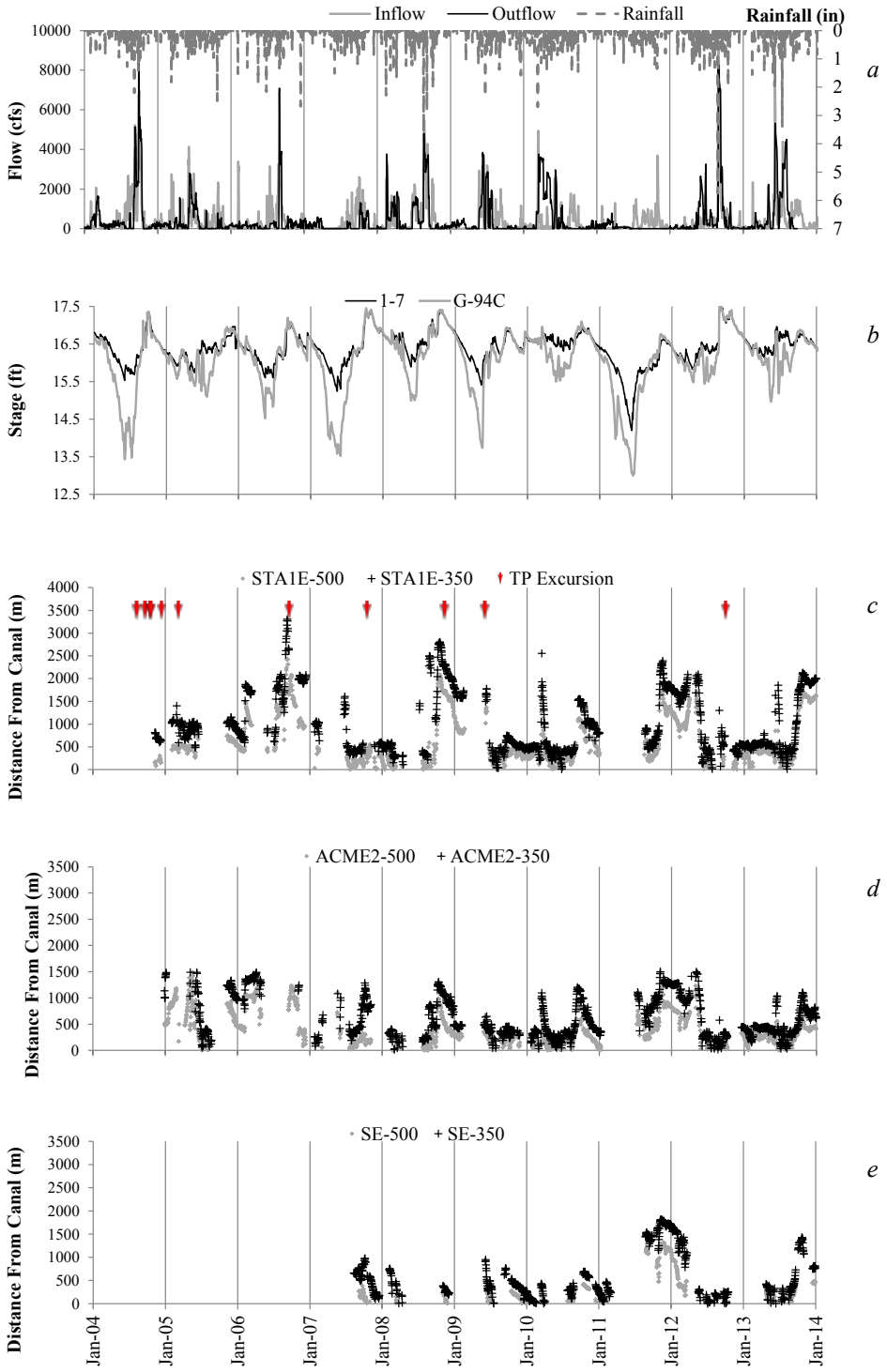



**Figure 7**. a) Inflow and outflow rates (cfs) summed for all structures from January 2004 to December 2013. b) Canal (G-94C) and marsh (1-7) stage levels (NGVD29). The 350 µS $cm^{-1}$ and 500 µS $cm^{-1}$ conductivity isopleths used to track canal water movement into and out of the marsh interior for: c) STA-1E, d) ACME-2, and e) SE transects. Red arrows indicate total phosphorus Consent Decree excursions.

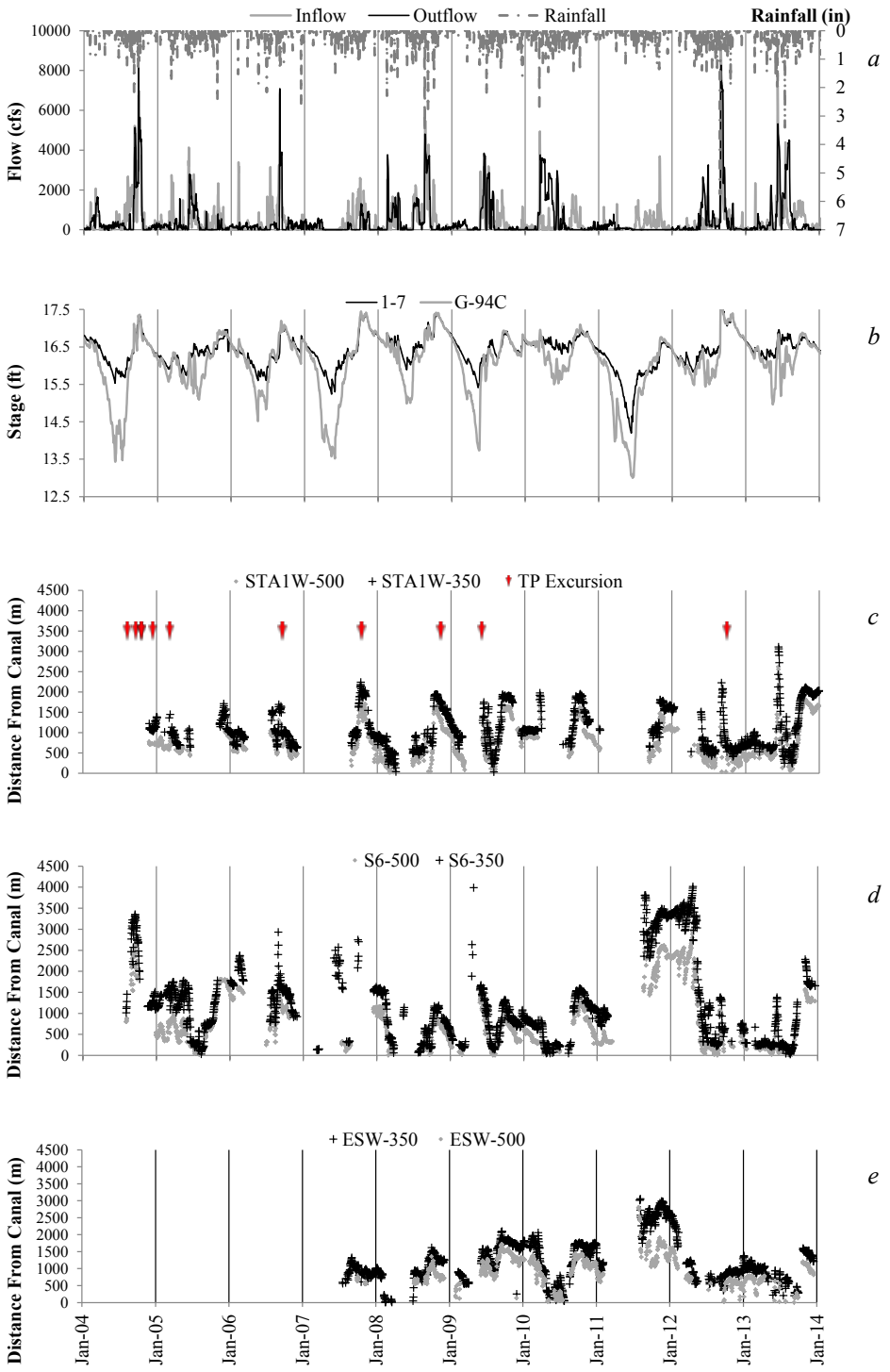



**Figure 8.** a) Inflow and outflow rates (cfs) summed for all structures from January 2004 to December 2013. b) Canal (G-94C) and marsh (1-7) stage levels (NGVD29). The 350 µS $cm^{-1}$ and 500 µS $cm^{-1}$ conductivity isopleths used to track canal water movement into and out of the marsh interior for: c) STA-1W, d) S-6, and e) the new ESW transects. Red arrows indicate total phosphorus Consent Decree excursions.

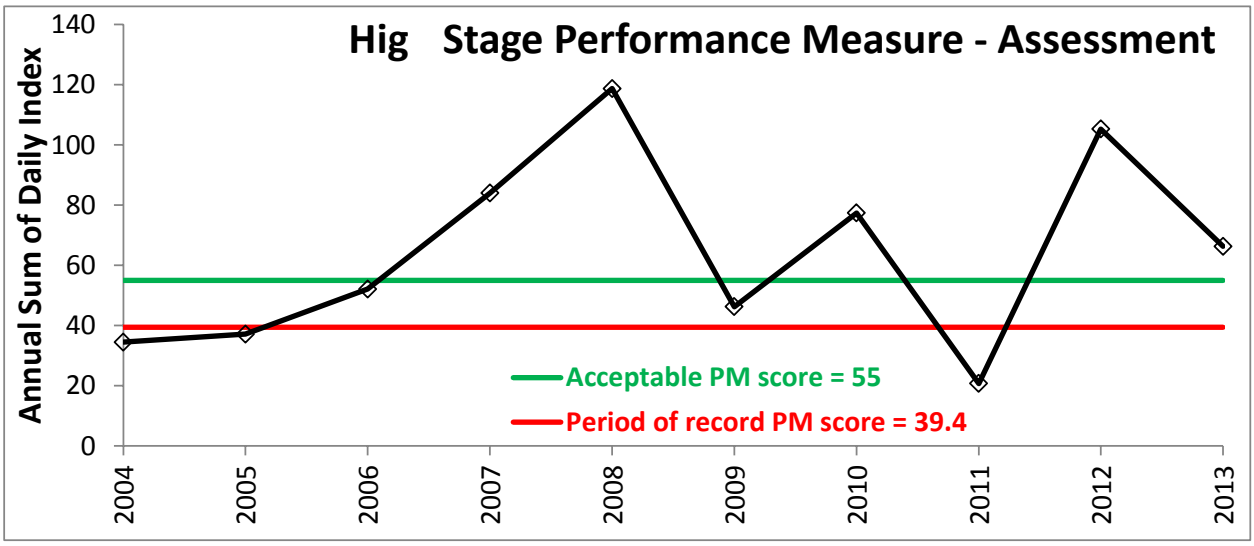



**Figure 9. High stage performance measure (PM1b) based on calendar year stage values. The black line represents the PM value for each year, the green line represent the acceptable PM score for the period from 2004 through 2013, and the red line represent the period of record PM score.**

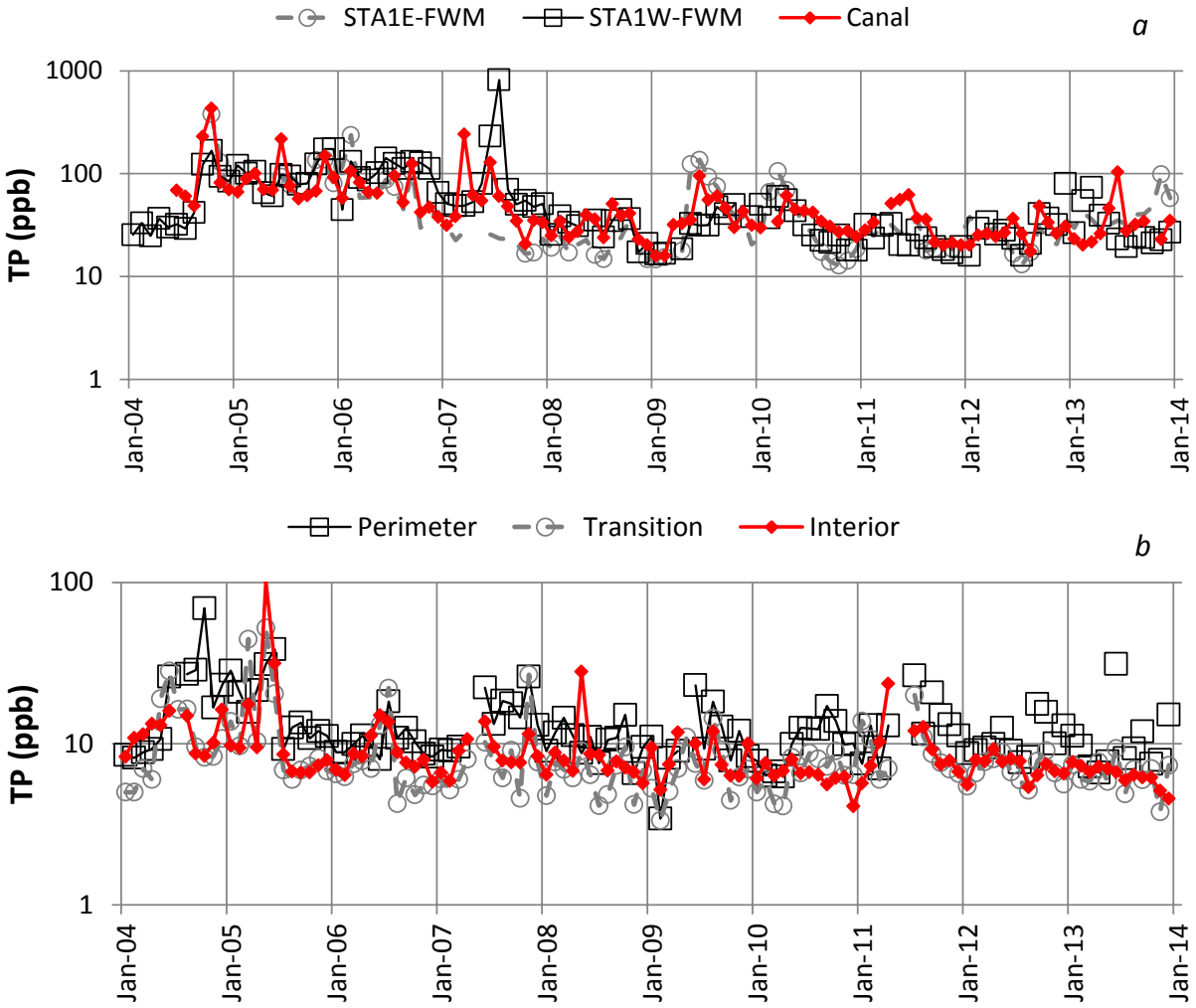



**Figure 10**. (a) Monthly TP FWM from Refuge inflow structures and TP concentration in the canal. (b) Monthly mean TP concentrations in marsh zones. The y-axes are based on a logarithmic scale.

## APPENDIX A

**Table A-1**. *(a)* Parameter abbreviations spelled-out. *(b)* Individual EVPA and LOXA station summary statistics of water quality data for calendar year 2013. Where values were below the minimum detection limits, one-half of the minimum detection limit is reported (Weaver et al. 2008). Previous summary statistics (2004 – 2012) can be found in the previous annual reports (USFWS 2007a, b, 2009, 2010a, b, 2012a, b, USFWS 2013).

*a*

| **ABBREVIATION** | **TERM** | **UNIT** |
|---|---|---|
| TEMP | Temperature | Celsius |
| DO | Dissolved oxygen | mg $L^{-1}$ |
| SPCOND | Specific conductance | μS $cm^{-1}$ |
| pH | pH | |
| TURB | Turbidity | mg $L^{-1}$ |
| TSS | Total suspended solids | mg $L^{-1}$ |
| NOX | Nitrate+nitrite | mg $L^{-1}$ |
| TKN | Total Kjeldahl Nitrogen | mg $L^{-1}$ |
| TN | Total nitrogen | mg $L^{-1}$ |
| OPO4 | Orthophosphate | μg $L^{-1}$ |
| TP | Total phosphorus | μg $L^{-1}$ |
| SIO2 | Silica | mg $L^{-1}$ |
| CA | Calcium | mg $L^{-1}$ |
| CL | Chloride | mg $L^{-1}$ |
| SO4 | Sulfate | mg $L^{-1}$ |
| ALKALNYA | Alkalinity | mg $L^{-1}$ |
| TDOC | Total dissolved organic carbon | mg $L^{-1}$ |
| TOC | Total organic carbon | mg $L^{-1}$ |
| TDS | Total dissolved solids | mg $L^{-1}$ |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 149 | 80 | 71 | 184 | 154 | 111 | 74 | 31 | 55 | 25 |
| 2013 | ALK | Mean | 187 | 204 | 149 | 173 | 197 | 159 | 89 | 23 | 62 | 34 |
| 2004-2012 | ALK | Variance | 1580 | 1841 | 1779 | 2452 | 1920 | 1570 | 1798 | 4094 | 570 | 54 |
| 2013 | ALK | Variance | 1417 | NA | 8141 | 1191 | 3177 | 3245 | 2245 | NA | 1231 | 3 |
| 2004-2012 | ALK | 25th Percentile | 128 | 57 | 45 | 144 | 127 | 80 | 47 | 14 | 40 | 20 |
| 2013 | ALK | 25th Percentile | 165 | 204 | 117 | 149 | 196 | 143 | 72 | 23 | 41 | 33 |
| 2004-2012 | ALK | Median | 151 | 64 | 58 | 183 | 150 | 102 | 53 | 16 | 48 | 23 |
| 2013 | ALK | Median | 168 | 204 | 149 | 181 | 217 | 163 | 89 | 23 | 53 | 35 |
| 2004-2012 | ALK | 75th Percentile | 172 | 92 | 81 | 212 | 195 | 134 | 97 | 22 | 61 | 28 |
| 2013 | ALK | 75th Percentile | 199 | 204 | 181 | 191 | 225 | 179 | 105 | 23 | 66 | 35 |
| 2004-2012 | ALK | Count | 36 | 27 | 31 | 99 | 39 | 32 | 15 | 24 | 69 | 31 |
| 2013 | ALK | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |
| 2004-2012 | CA | Mean | 52 | 25 | 21 | 60 | 66 | 48 | 20 | 6 | 20 | 8 |
| 2013 | CA | Mean | 62 | 71 | 51 | 56 | 60 | 51 | 28 | 6 | 18 | 9 |
| 2004-2012 | CA | Variance | 197 | 189 | 185 | 346 | 13195 | 6625 | 209 | 3 | 104 | 7 |
| 2013 | CA | Variance | 426 | NA | 1210 | 185 | 333 | 586 | 328 | NA | 181 | 0 |
| 2004-2012 | CA | 25th Percentile | 43 | 17 | 12 | 45 | 34 | 23 | 13 | 5 | 12 | 6 |
| 2013 | CA | 25th Percentile | 51 | 71 | 39 | 49 | 58 | 42 | 21 | 6 | 10 | 9 |
| 2004-2012 | CA | Median | 51 | 19 | 17 | 58 | 48 | 31 | 14 | 6 | 17 | 7 |
| 2013 | CA | Median | 51 | 71 | 51 | 54 | 65 | 49 | 28 | 6 | 14 | 9 |
| 2004-2012 | CA | 75th Percentile | 58 | 29 | 24 | 71 | 61 | 44 | 20 | 7 | 26 | 8 |
| 2013 | CA | 75th Percentile | 69 | 71 | 63 | 58 | 67 | 58 | 34 | 6 | 19 | 10 |
| 2004-2012 | CA | Count | 36 | 27 | 31 | 98 | 39 | 33 | 15 | 24 | 69 | 31 |
| 2013 | CA | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |
| 2004-2012 | CL | Mean | 92 | 39 | 38 | 116 | 80 | 54 | 30 | 28 | 40 | 25 |
| 2013 | CL | Mean | 76 | 59 | 56 | 115 | 75 | 69 | 44 | 21 | 41 | 24 |
| 2004-2012 | CL | Variance | 1187 | 461 | 547 | 1371 | 1550 | 854 | 401 | 111 | 684 | 164 |
| 2013 | CL | Variance | 618 | 1366 | 1650 | 1037 | 1635 | 1431 | 583 | 47 | 1038 | 35 |
| 2004-2012 | CL | 25th Percentile | 65 | 26 | 21 | 96 | 49 | 30 | 20 | 19 | 22 | 16 |
| 2013 | CL | 25th Percentile | 61 | 33 | 22 | 88 | 47 | 41 | 27 | 15 | 19 | 20 |
| 2004-2012 | CL | Median | 92 | 33 | 32 | 123 | 69 | 51 | 26 | 27 | 30 | 22 |
| 2013 | CL | Median | 86 | 37 | 52 | 119 | 56 | 45 | 42 | 19 | 30 | 25 |
| 2004-2012 | CL | 75th Percentile | 119 | 43 | 46 | 140 | 110 | 77 | 29 | 34 | 49 | 28 |
| 2013 | CL | 75th Percentile | 92 | 86 | 87 | 140 | 106 | 106 | 44 | 26 | 56 | 28 |
| 2004-2012 | CL | Count | 70 | 49 | 56 | 97 | 65 | 61 | 34 | 52 | 78 | 63 |
| 2013 | CL | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | 0.30 | 0.31 | 0.32 | 1.29 | 0.36 | 0.30 | 0.29 | 0.28 | 0.44 | 0.33 |
| 2013 | DCS | Mean | 0.30 | 0.27 | 0.29 | 1.08 | 0.33 | 0.31 | 0.29 | 0.28 | 0.41 | 0.32 |
| 2004-2012 | DCS | Variance | 0.02 | 0.01 | 0.02 | 0.01 | 0.02 | 0.02 | 0.01 | 0.01 | 0.02 | 0.01 |
| 2013 | DCS | Variance | 0.02 | 0.02 | 0.02 | 0.26 | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| 2004-2012 | DCS | 25th Percentile | 0.21 | 0.22 | 0.21 | 1.30 | 0.25 | 0.19 | 0.20 | 0.21 | 0.34 | 0.24 |
| 2013 | DCS | 25th Percentile | 0.22 | 0.19 | 0.21 | 1.30 | 0.26 | 0.23 | 0.21 | 0.22 | 0.34 | 0.25 |
| 2004-2012 | DCS | Median | 0.26 | 0.29 | 0.33 | 1.30 | 0.33 | 0.25 | 0.28 | 0.27 | 0.40 | 0.31 |
| 2013 | DCS | Median | 0.26 | 0.22 | 0.25 | 1.30 | 0.30 | 0.28 | 0.22 | 0.25 | 0.39 | 0.28 |
| 2004-2012 | DCS | 75th Percentile | 0.37 | 0.40 | 0.40 | 1.30 | 0.47 | 0.39 | 0.34 | 0.35 | 0.54 | 0.43 |
| 2013 | DCS | 75th Percentile | 0.35 | 0.30 | 0.27 | 1.30 | 0.37 | 0.33 | 0.32 | 0.29 | 0.47 | 0.37 |
| 2004-2012 | DCS | Count | 58 | 36 | 41 | 75 | 55 | 49 | 27 | 42 | 60 | 52 |
| 2013 | DCS | Count | 10 | 7 | 6 | 12 | 10 | 8 | 5 | 7 | 11 | 11 |
| 2004-2012 | SIO2 | Mean | 15 | 15 | 14 | 15 | 18 | 16 | 15 | 5 | 9 | 6 |
| 2013 | SIO2 | Mean | 16 | 20 | 13 | 12 | 18 | 15 | 11 | 1 | 8 | 5 |
| 2004-2012 | SIO2 | Variance | 64 | 57 | 65 | 53 | 65 | 88 | 100 | 9 | 36 | 17 |
| 2013 | SIO2 | Variance | 18 | NA | 104 | 21 | 33 | 36 | 29 | NA | 57 | 16 |
| 2004-2012 | SIO2 | 25th Percentile | 10 | 11 | 9 | 9 | 14 | 11 | 9 | 3 | 4 | 3 |
| 2013 | SIO2 | 25th Percentile | 14 | 20 | 9 | 8 | 18 | 13 | 9 | 1 | 3 | 3 |
| 2004-2012 | SIO2 | Median | 14 | 15 | 14 | 14 | 18 | 15 | 13 | 4 | 8 | 4 |
| 2013 | SIO2 | Median | 16 | 20 | 13 | 13 | 20 | 16 | 11 | 1 | 3 | 4 |
| 2004-2012 | SIO2 | 75th Percentile | 19 | 19 | 19 | 22 | 24 | 22 | 19 | 7 | 12 | 8 |
| 2013 | SIO2 | 75th Percentile | 18 | 20 | 17 | 15 | 23 | 18 | 13 | 1 | 13 | 7 |
| 2004-2012 | SIO2 | Count | 36 | 27 | 31 | 98 | 39 | 32 | 15 | 24 | 69 | 31 |
| 2013 | SIO2 | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 13.0 | 6.9 | 5.3 | 46.9 | 19.5 | 10.3 | 4.8 | 0.4 | 4.9 | 1.0 |
| 2013 | SO4 | Mean | 12.8 | 13.3 | 14.2 | 41.7 | 20.1 | 19.8 | 7.5 | 0.3 | 6.9 | 0.7 |
| 2004-2012 | SO4 | Variance | 155.9 | 125.4 | 105.4 | 494.7 | 333.1 | 161.1 | 108.7 | 0.5 | 42.6 | 3.2 |
| 2013 | SO4 | Variance | 525.6 | 543.3 | 791.5 | 312.5 | 609.9 | 636.8 | 226.1 | 0.0 | 223.9 | 0.2 |
| 2004-2012 | SO4 | 25th Percentile | 3.6 | 1.4 | 1.0 | 31.3 | 6.5 | 2.3 | 0.7 | 0.1 | 1.2 | 0.3 |
| 2013 | SO4 | 25th Percentile | 3.1 | 1.0 | 0.9 | 32.1 | 2.1 | 1.7 | 0.8 | 0.2 | 1.0 | 0.5 |
| 2004-2012 | SO4 | Median | 8.0 | 2.6 | 1.6 | 46.5 | 11.3 | 4.7 | 1.1 | 0.2 | 1.9 | 0.5 |
| 2013 | SO4 | Median | 3.4 | 1.5 | 2.5 | 34.9 | 5.8 | 5.8 | 0.8 | 0.2 | 1.1 | 0.6 |
| 2004-2012 | SO4 | 75th Percentile | 19.2 | 4.9 | 3.4 | 62.0 | 32.0 | 10.2 | 2.1 | 0.5 | 6.0 | 0.7 |
| 2013 | SO4 | 75th Percentile | 10.0 | 12.1 | 6.5 | 51.7 | 35.7 | 32.8 | 0.9 | 0.3 | 3.6 | 0.6 |
| 2004-2012 | SO4 | Count | 70 | 49 | 56 | 94 | 65 | 61 | 34 | 52 | 77 | 63 |
| 2013 | SO4 | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |
| 2004-2012 | TDEPTH | Mean | 0.23 | 0.22 | 0.27 | 1.10 | 0.25 | 0.22 | 0.19 | 0.19 | 0.32 | 0.22 |
| 2013 | TDEPTH | Mean | 0.21 | 0.19 | 0.22 | NA | 0.25 | 0.21 | 0.22 | 0.17 | 0.32 | 0.20 |
| 2004-2012 | TDEPTH | Variance | 0.01 | 0.01 | 0.10 | 0.19 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 |
| 2013 | TDEPTH | Variance | 0.02 | 0.02 | 0.03 | NA | 0.02 | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 |
| 2004-2012 | TDEPTH | 25th Percentile | 0.15 | 0.15 | 0.13 | 1.30 | 0.17 | 0.13 | 0.13 | 0.12 | 0.25 | 0.14 |
| 2013 | TDEPTH | 25th Percentile | 0.14 | 0.12 | 0.14 | NA | 0.16 | 0.11 | 0.17 | 0.11 | 0.25 | 0.13 |
| 2004-2012 | TDEPTH | Median | 0.21 | 0.20 | 0.21 | 1.30 | 0.21 | 0.18 | 0.18 | 0.17 | 0.30 | 0.19 |
| 2013 | TDEPTH | Median | 0.16 | 0.17 | 0.17 | NA | 0.20 | 0.15 | 0.19 | 0.14 | 0.30 | 0.18 |
| 2004-2012 | TDEPTH | 75th Percentile | 0.31 | 0.30 | 0.31 | 1.30 | 0.33 | 0.31 | 0.24 | 0.24 | 0.39 | 0.28 |
| 2013 | TDEPTH | 75th Percentile | 0.24 | 0.19 | 0.21 | NA | 0.27 | 0.22 | 0.23 | 0.18 | 0.38 | 0.22 |
| 2004-2012 | TDEPTH | Count | 64 | 45 | 50 | 10 | 56 | 53 | 38 | 49 | 69 | 62 |
| 2013 | TDEPTH | Count | 10 | 7 | 6 | 0 | 10 | 9 | 5 | 8 | 11 | 11 |
| 2004-2012 | TDOC | Mean | 149 | 80 | 71 | 184 | 154 | 111 | 74 | 31 | 55 | 25 |
| 2013 | TDOC | Mean | 187 | 204 | 149 | 173 | 197 | 159 | 89 | 23 | 62 | 34 |
| 2004-2012 | TDOC | Variance | 1580 | 1841 | 1779 | 2452 | 1920 | 1570 | 1798 | 4094 | 570 | 54 |
| 2013 | TDOC | Variance | 1417 | NA | 8141 | 1191 | 3177 | 3245 | 2245 | NA | 1231 | 3 |
| 2004-2012 | TDOC | 25th Percentile | 128 | 57 | 45 | 144 | 127 | 80 | 47 | 14 | 40 | 20 |
| 2013 | TDOC | 25th Percentile | 165 | 204 | 117 | 149 | 196 | 143 | 72 | 23 | 41 | 33 |
| 2004-2012 | TDOC | Median | 151 | 64 | 58 | 183 | 150 | 102 | 53 | 16 | 48 | 23 |
| 2013 | TDOC | Median | 168 | 204 | 149 | 181 | 217 | 163 | 89 | 23 | 53 | 35 |
| 2004-2012 | TDOC | 75th Percentile | 172 | 92 | 81 | 212 | 195 | 134 | 97 | 22 | 61 | 28 |
| 2013 | TDOC | 75th Percentile | 199 | 204 | 181 | 191 | 225 | 179 | 105 | 23 | 66 | 35 |
| 2004-2012 | TDOC | Count | 36 | 27 | 31 | 99 | 39 | 32 | 15 | 24 | 69 | 31 |
| 2013 | TDOC | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 403 | 218 | 216 | 514 | 411 | 304 | 204 | 103 | 184 | 113 |
| 2013 | TDS | Mean | 452 | 580 | 436 | 482 | 482 | 407 | 257 | 94 | 191 | 123 |
| 2004-2012 | TDS | Variance | 11479 | 13610 | 15273 | 22741 | 20526 | 16394 | 22035 | 567 | 7498 | 1605 |
| 2013 | TDS | Variance | 14382 | NA | 52165 | 9520 | 21561 | 26710 | 25992 | NA | 12938 | 102 |
| 2004-2012 | TDS | 25th Percentile | 314 | 150 | 130 | 415 | 301 | 197 | 129 | 89 | 120 | 88 |
| 2013 | TDS | 25th Percentile | 383 | 580 | 355 | 414 | 483 | 355 | 200 | 94 | 115 | 120 |
| 2004-2012 | TDS | Median | 400 | 185 | 182 | 520 | 410 | 285 | 160 | 100 | 155 | 110 |
| 2013 | TDS | Median | 388 | 580 | 436 | 492 | 561 | 423 | 257 | 94 | 158 | 128 |
| 2004-2012 | TDS | 75th Percentile | 503 | 243 | 255 | 611 | 543 | 403 | 191 | 115 | 229 | 122 |
| 2013 | TDS | 75th Percentile | 489 | 580 | 516 | 555 | 566 | 475 | 314 | 94 | 219 | 129 |
| 2004-2012 | TDS | Count | 36 | 26 | 30 | 99 | 39 | 32 | 15 | 23 | 69 | 31 |
| 2013 | TDS | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |
| 2004-2012 | TOC | Mean | 31 | 25 | 27 | 30 | 30 | 25 | 25 | 25 | 22 | 22 |
| 2013 | TOC | Mean | 35 | 30 | 28 | 28 | 32 | 28 | 22 | 17 | 23 | 24 |
| 2004-2012 | TOC | Variance | 45 | 61 | 50 | 55 | 47 | 32 | 31 | 29 | 30 | 35 |
| 2013 | TOC | Variance | 136 | NA | 56 | 93 | 14 | 28 | 2 | NA | 33 | 123 |
| 2004-2012 | TOC | 25th Percentile | 29 | 21 | 23 | 25 | 25 | 21 | 20 | 21 | 19 | 18 |
| 2013 | TOC | 25th Percentile | 29 | 30 | 25 | 23 | 32 | 25 | 21 | 17 | 19 | 17 |
| 2004-2012 | TOC | Median | 31 | 22 | 26 | 31 | 32 | 26 | 24 | 24 | 22 | 20 |
| 2013 | TOC | Median | 36 | 30 | 28 | 25 | 34 | 28 | 22 | 17 | 23 | 18 |
| 2004-2012 | TOC | 75th Percentile | 34 | 27 | 31 | 35 | 34 | 30 | 28 | 28 | 25 | 24 |
| 2013 | TOC | 75th Percentile | 41 | 30 | 30 | 30 | 34 | 32 | 22 | 17 | 25 | 27 |
| 2004-2012 | TOC | Count | 36 | 27 | 31 | 97 | 38 | 31 | 15 | 24 | 67 | 30 |
| 2013 | TOC | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |
| 2004-2012 | DO | Mean | 2.9 | 3.9 | 2.8 | 5.0 | 2.9 | 3.4 | 2.9 | 4.9 | 3.1 | 5.3 |
| 2013 | DO | Mean | 2.9 | 2.7 | 1.5 | 4.7 | 1.6 | 2.2 | 2.2 | 4.7 | 1.5 | 3.9 |
| 2004-2012 | DO | Variance | 2.9 | 4.2 | 2.3 | 3.5 | 3.4 | 3.0 | 2.3 | 5.4 | 3.3 | 4.3 |
| 2013 | DO | Variance | 5.6 | 0.7 | 0.8 | 2.5 | 0.3 | 0.8 | 0.1 | 14.6 | 0.9 | 3.6 |
| 2004-2012 | DO | 25th Percentile | 1.6 | 2.4 | 1.7 | 3.7 | 1.7 | 2.5 | 1.9 | 2.8 | 1.7 | 3.6 |
| 2013 | DO | 25th Percentile | 0.9 | 1.9 | 1.3 | 3.5 | 1.2 | 1.8 | 1.9 | 2.7 | 0.9 | 2.5 |
| 2004-2012 | DO | Median | 2.6 | 3.9 | 2.4 | 5.1 | 2.5 | 3.2 | 2.6 | 4.9 | 2.8 | 5.1 |
| 2013 | DO | Median | 1.9 | 3.0 | 1.6 | 4.7 | 1.7 | 2.4 | 2.3 | 4.5 | 1.2 | 3.6 |
| 2004-2012 | DO | 75th Percentile | 4.0 | 4.9 | 3.5 | 6.4 | 4.1 | 4.2 | 3.9 | 6.6 | 4.2 | 6.7 |
| 2013 | DO | 75th Percentile | 5.2 | 3.3 | 1.8 | 5.7 | 1.9 | 2.7 | 2.4 | 5.1 | 1.9 | 5.1 |
| 2004-2012 | DO | Count | 68 | 47 | 54 | 97 | 66 | 61 | 36 | 52 | 77 | 64 |
| 2013 | DO | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 8 | 7 | 7 | 23 | 12 | 6 | 9 | 4 | 7 | 6 |
| 2013 | OPO4 | Mean | 55 | 4 | 4 | 26 | 30 | 4 | 3 | 2 | 3 | 3 |
| 2004-2012 | OPO4 | Variance | 128 | 188 | 166 | 1592 | 901 | 93 | 477 | 19 | 166 | 124 |
| 2013 | OPO4 | Variance | 7557 | NA | 1 | 4619 | 3093 | 2 | 0 | NA | 3 | 1 |
| 2004-2012 | OPO4 | 25th Percentile | 3 | 3 | 3 | 4 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2013 | OPO4 | 25th Percentile | 4 | 4 | 3 | 4 | 5 | 3 | 3 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Median | 4 | 4 | 4 | 7 | 4 | 3 | 3 | 3 | 4 | 3 |
| 2013 | OPO4 | Median | 6 | 4 | 4 | 7 | 5 | 4 | 3 | 2 | 3 | 2 |
| 2004-2012 | OPO4 | 75th Percentile | 6 | 5 | 6 | 21 | 7 | 5 | 5 | 4 | 5 | 4 |
| 2013 | OPO4 | 75th Percentile | 80 | 4 | 4 | 10 | 6 | 5 | 3 | 2 | 4 | 3 |
| 2004-2012 | OPO4 | Count | 34 | 25 | 29 | 90 | 38 | 30 | 15 | 23 | 65 | 30 |
| 2013 | OPO4 | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |
| 2004-2012 | PH | Mean | 7.1 | 6.9 | 6.8 | 7.6 | 7.0 | 6.9 | 6.6 | 6.7 | 6.7 | 6.8 |
| 2013 | PH | Mean | 6.8 | 6.8 | 6.8 | 7.5 | 6.8 | 6.9 | 6.9 | 6.6 | 6.4 | 6.6 |
| 2004-2012 | PH | Variance | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.2 | 0.1 | 0.2 |
| 2013 | PH | Variance | 0.1 | 0.1 | 0.2 | 0.0 | 0.1 | 0.1 | 0.1 | 0.3 | 0.1 | 0.2 |
| 2004-2012 | PH | 25th Percentile | 7.0 | 6.7 | 6.6 | 7.5 | 6.8 | 6.7 | 6.5 | 6.4 | 6.5 | 6.5 |
| 2013 | PH | 25th Percentile | 6.6 | 6.6 | 6.7 | 7.4 | 6.6 | 6.6 | 6.7 | 6.2 | 6.2 | 6.4 |
| 2004-2012 | PH | Median | 7.1 | 6.8 | 6.8 | 7.7 | 7.0 | 6.9 | 6.6 | 6.6 | 6.7 | 6.7 |
| 2013 | PH | Median | 6.9 | 6.7 | 6.9 | 7.5 | 6.7 | 6.7 | 7.1 | 6.4 | 6.5 | 6.6 |
| 2004-2012 | PH | 75th Percentile | 7.2 | 7.0 | 7.0 | 7.8 | 7.1 | 7.1 | 6.8 | 6.9 | 6.9 | 6.9 |
| 2013 | PH | 75th Percentile | 7.0 | 7.0 | 7.1 | 7.6 | 7.2 | 7.1 | 7.1 | 7.1 | 6.6 | 6.9 |
| 2004-2012 | PH | Count | 69 | 48 | 55 | 99 | 67 | 62 | 37 | 51 | 80 | 66 |
| 2013 | PH | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |
| 2004-2012 | SPCOND | Mean | 614 | 279 | 262 | 807 | 555 | 378 | 225 | 148 | 251 | 139 |
| 2013 | SPCOND | Mean | 551 | 393 | 394 | 723 | 553 | 509 | 302 | 125 | 268 | 140 |
| 2004-2012 | SPCOND | Variance | 39520 | 22630 | 25139 | 55933 | 54658 | 33202 | 21207 | 2434 | 18209 | 2696 |
| 2013 | SPCOND | Variance | 30483 | 36447 | 77863 | 54490 | 67008 | 66883 | 26138 | 739 | 36609 | 2066 |
| 2004-2012 | SPCOND | 25th Percentile | 453 | 190 | 162 | 682 | 365 | 233 | 153 | 111 | 151 | 108 |
| 2013 | SPCOND | 25th Percentile | 456 | 256 | 188 | 647 | 362 | 316 | 199 | 106 | 139 | 118 |
| 2004-2012 | SPCOND | Median | 621 | 243 | 204 | 819 | 488 | 345 | 181 | 139 | 206 | 127 |
| 2013 | SPCOND | Median | 582 | 291 | 322 | 769 | 425 | 357 | 258 | 112 | 204 | 153 |
| 2004-2012 | SPCOND | 75th Percentile | 771 | 304 | 304 | 959 | 769 | 494 | 216 | 178 | 322 | 157 |
| 2013 | SPCOND | 75th Percentile | 613 | 534 | 491 | 888 | 828 | 693 | 272 | 141 | 320 | 165 |
| 2004-2012 | SPCOND | Count | 70 | 49 | 56 | 98 | 66 | 61 | 37 | 53 | 79 | 65 |
| 2013 | SPCOND | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 23 | 23 | 22 | 25 | 23 | 23 | 23 | 25 | 24 | 24 |
| 2013 | TEMP | Mean | 25 | 23 | 23 | 26 | 23 | 24 | 25 | 27 | 23 | 24 |
| 2004-2012 | TEMP | Variance | 22 | 21 | 23 | 22 | 23 | 21 | 18 | 23 | 21 | 20 |
| 2013 | TEMP | Variance | 9 | 15 | 11 | 13 | 13 | 14 | 15 | 10 | 13 | 14 |
| 2004-2012 | TEMP | 25th Percentile | 20 | 19 | 19 | 22 | 21 | 20 | 21 | 21 | 21 | 21 |
| 2013 | TEMP | 25th Percentile | 22 | 21 | 21 | 23 | 21 | 22 | 21 | 24 | 21 | 21 |
| 2004-2012 | TEMP | Median | 23 | 23 | 22 | 26 | 23 | 24 | 23 | 25 | 24 | 26 |
| 2013 | TEMP | Median | 25 | 22 | 22 | 24 | 23 | 23 | 24 | 28 | 22 | 23 |
| 2004-2012 | TEMP | 75th Percentile | 27 | 27 | 26 | 29 | 27 | 27 | 27 | 28 | 28 | 28 |
| 2013 | TEMP | 75th Percentile | 27 | 24 | 25 | 29 | 27 | 27 | 27 | 29 | 27 | 27 |
| 2004-2012 | TEMP | Count | 70 | 49 | 56 | 99 | 67 | 62 | 37 | 53 | 80 | 66 |
| 2013 | TEMP | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |
| 2004-2012 | TN | Mean | 1.5 | 1.1 | 1.2 | 2.0 | 1.6 | 1.3 | 1.1 | 1.3 | 1.2 | 1.2 |
| 2013 | TN | Mean | 2.1 | 2.2 | 2.1 | 1.8 | 2.1 | 1.8 | 1.2 | 1.2 | 1.2 | 1.2 |
| 2004-2012 | TN | Variance | 0.1 | 0.1 | 0.1 | 0.3 | 0.2 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 |
| 2013 | TN | Variance | 1.5 | NA | 1.1 | 1.0 | 1.2 | 1.3 | 0.0 | NA | 0.0 | 0.1 |
| 2004-2012 | TN | 25th Percentile | 1.3 | 0.9 | 1.0 | 1.6 | 1.3 | 1.0 | 1.0 | 1.1 | 1.0 | 1.0 |
| 2013 | TN | 25th Percentile | 1.3 | 2.2 | 1.7 | 1.4 | 1.5 | 1.2 | 1.1 | 1.2 | 1.0 | 1.1 |
| 2004-2012 | TN | Median | 1.5 | 1.0 | 1.1 | 1.9 | 1.6 | 1.2 | 1.1 | 1.3 | 1.1 | 1.2 |
| 2013 | TN | Median | 1.4 | 2.2 | 2.1 | 1.5 | 1.8 | 1.4 | 1.2 | 1.2 | 1.2 | 1.2 |
| 2004-2012 | TN | 75th Percentile | 1.6 | 1.1 | 1.3 | 2.2 | 1.9 | 1.5 | 1.3 | 1.4 | 1.3 | 1.4 |
| 2013 | TN | 75th Percentile | 2.4 | 2.2 | 2.4 | 1.8 | 1.9 | 1.9 | 1.2 | 1.2 | 1.3 | 1.4 |
| 2004-2012 | TN | Count | 34 | 26 | 29 | 96 | 36 | 29 | 14 | 23 | 66 | 29 |
| 2013 | TN | Count | 3 | 1 | 2 | 12 | 5 | 4 | 2 | 1 | 11 | 3 |

| PERIOD | PARAMETER | STATISTIC | LOXA101 | LOXA102 | LOXA103 | LOXA104 | LOXA105 | LOXA106 | LOXA107 | LOXA108 | LOXA109 | LOXA110 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 17 | 10 | 11 | 60 | 23 | 12 | 11 | 7 | 10 | 10 |
| 2013 | TP | Mean | 35 | 11 | 11 | 50 | 31 | 13 | 7 | 6 | 10 | 7 |
| 2004-2012 | TP | Variance | 284 | 20 | 36 | 10850 | 830 | 77 | 83 | 16 | 34 | 162 |
| 2013 | TP | Variance | 2595 | 21 | 30 | 4842 | 1887 | 66 | 15 | 10 | 33 | 7 |
| 2004-2012 | TP | 25th Percentile | 9 | 7 | 8 | 27 | 12 | 7 | 7 | 5 | 7 | 6 |
| 2013 | TP | 25th Percentile | 15 | 8 | 7 | 27 | 14 | 7 | 4 | 4 | 7 | 6 |
| 2004-2012 | TP | Median | 13 | 9 | 10 | 36 | 17 | 10 | 9 | 6 | 8 | 7 |
| 2013 | TP | Median | 20 | 11 | 9 | 30 | 16 | 9 | 8 | 6 | 7 | 6 |
| 2004-2012 | TP | 75th Percentile | 18 | 12 | 12 | 60 | 24 | 14 | 12 | 8 | 11 | 10 |
| 2013 | TP | 75th Percentile | 23 | 15 | 12 | 36 | 21 | 19 | 9 | 8 | 12 | 8 |
| 2004-2012 | TP | Count | 73 | 49 | 56 | 99 | 69 | 62 | 37 | 54 | 80 | 65 |
| 2013 | TP | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |
| 2004-2012 | TSS | Mean | 3.5 | 3.0 | 3.4 | 4.7 | 3.5 | 3.2 | 3.5 | 3.7 | 3.5 | 3.5 |
| 2013 | TSS | Mean | 5.0 | 5.0 | 5.0 | 5.3 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Variance | 5.8 | 2.0 | 2.7 | 5.1 | 3.5 | 2.3 | 12.2 | 3.0 | 3.3 | 2.8 |
| 2013 | TSS | Variance | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2004-2012 | TSS | 25th Percentile | 1.7 | 1.6 | 1.6 | 3.0 | 1.6 | 1.6 | 1.6 | 2.0 | 2.0 | 1.6 |
| 2013 | TSS | 25th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Median | 3.0 | 3.0 | 3.0 | 4.7 | 3.0 | 3.0 | 2.0 | 4.0 | 3.0 | 4.0 |
| 2013 | TSS | Median | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | 75th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2013 | TSS | 75th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Count | 62 | 42 | 48 | 99 | 60 | 55 | 30 | 46 | 77 | 56 |
| 2013 | TSS | Count | 10 | 7 | 6 | 12 | 10 | 9 | 5 | 8 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 29 | 46 | 24 | 20 | 177 | 169 | 101 | 52 | 30 | 20 |
| 2013 | ALK | Mean | 27 | 51 | 23 | 19 | 169 | | 99 | 44 | 28 | 20 |
| 2004-2012 | ALK | Variance | 99 | 431 | 59 | 41 | 2510 | 3803 | 1817 | 777 | 83 | 47 |
| 2013 | ALK | Variance | 34 | 229 | 27 | 9 | 1543 | | 1377 | 137 | 61 | 18 |
| 2004-2012 | ALK | 25th Percentile | 23 | 33 | 17 | 15 | 140 | 141 | 69 | 31 | 25 | 16 |
| 2013 | ALK | 25th Percentile | 23 | 41 | 21 | 17 | 148 | | 74 | 36 | 23 | 17 |
| 2004-2012 | ALK | Median | 28 | 40 | 24 | 20 | 176 | 176 | 97 | 43 | 30 | 18 |
| 2013 | ALK | Median | 28 | 44 | 24 | 19 | 168 | | 80 | 46 | 30 | 21 |
| 2004-2012 | ALK | 75th Percentile | 33 | 53 | 28 | 26 | 204 | 216 | 130 | 66 | 37 | 25 |
| 2013 | ALK | 75th Percentile | 30 | 60 | 27 | 21 | 181 | | 135 | 52 | 35 | 22 |
| 2004-2012 | ALK | Count | 41 | 58 | 43 | 45 | 99 | 34 | 57 | 70 | 68 | 81 |
| 2013 | ALK | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |
| 2004-2012 | CA | Mean | 9 | 14 | 7 | 7 | 57 | 55 | 32 | 17 | 9 | 7 |
| 2013 | CA | Mean | 7 | 15 | 7 | 5 | 55 | | 30 | 13 | 8 | 6 |
| 2004-2012 | CA | Variance | 22 | 47 | 6 | 21 | 350 | 489 | 233 | 84 | 11 | 20 |
| 2013 | CA | Variance | 3 | 40 | 2 | 0 | 261 | | 169 | 17 | 7 | 2 |
| 2004-2012 | CA | 25th Percentile | 7 | 10 | 6 | 5 | 45 | 43 | 19 | 10 | 8 | 5 |
| 2013 | CA | 25th Percentile | 6 | 11 | 6 | 5 | 47 | | 20 | 10 | 6 | 4 |
| 2004-2012 | CA | Median | 8 | 12 | 7 | 7 | 55 | 53 | 30 | 14 | 9 | 6 |
| 2013 | CA | Median | 7 | 12 | 6 | 5 | 55 | | 23 | 13 | 8 | 6 |
| 2004-2012 | CA | 75th Percentile | 11 | 17 | 9 | 8 | 68 | 70 | 44 | 24 | 11 | 8 |
| 2013 | CA | 75th Percentile | 9 | 19 | 7 | 6 | 56 | | 42 | 15 | 11 | 7 |
| 2004-2012 | CA | Count | 41 | 58 | 43 | 45 | 99 | 33 | 58 | 70 | 69 | 78 |
| 2013 | CA | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |
| 2004-2012 | CL | Mean | 20 | 31 | 20 | 19 | 107 | 88 | 61 | 34 | 20 | 24 |
| 2013 | CL | Mean | 17 | 32 | 19 | 19 | 113 | | 53 | 27 | 18 | 19 |
| 2004-2012 | CL | Variance | 115 | 555 | 84 | 44 | 1534 | 1617 | 1407 | 747 | 69 | 107 |
| 2013 | CL | Variance | 28 | 672 | 42 | 45 | 793 | | 1402 | 259 | 60 | 45 |
| 2004-2012 | CL | 25th Percentile | 13 | 16 | 13 | 14 | 84 | 68 | 29 | 16 | 13 | 16 |
| 2013 | CL | 25th Percentile | 13 | 14 | 14 | 13 | 95 | | 30 | 18 | 11 | 14 |
| 2004-2012 | CL | Median | 18 | 22 | 17 | 18 | 111 | 94 | 54 | 22 | 18 | 21 |
| 2013 | CL | Median | 17 | 23 | 19 | 20 | 115 | | 37 | 26 | 16 | 18 |
| 2004-2012 | CL | 75th Percentile | 23 | 38 | 23 | 22 | 137 | 110 | 88 | 38 | 23 | 28 |
| 2013 | CL | 75th Percentile | 21 | 41 | 23 | 24 | 134 | | 86 | 31 | 24 | 25 |
| 2004-2012 | CL | Count | 69 | 74 | 74 | 72 | 99 | 34 | 78 | 82 | 84 | 91 |
| 2013 | CL | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | 0.39 | 0.44 | 0.40 | 0.40 | 1.30 | 0.86 | 0.42 | 0.46 | 0.46 | 0.49 |
| 2013 | DCS | Mean | 0.35 | 0.41 | 0.36 | 0.37 | 1.08 | | 0.38 | 0.43 | 0.41 | 0.48 |
| 2004-2012 | DCS | Variance | 0.01 | 0.02 | 0.01 | 0.02 | | 0.09 | 0.02 | 0.02 | 0.02 | 0.02 |
| 2013 | DCS | Variance | 0.01 | 0.01 | 0.01 | 0.01 | 0.26 | | 0.01 | 0.01 | 0.01 | 0.01 |
| 2004-2012 | DCS | 25th Percentile | 0.30 | 0.33 | 0.32 | 0.31 | 1.30 | 0.83 | 0.33 | 0.37 | 0.37 | 0.40 |
| 2013 | DCS | 25th Percentile | 0.31 | 0.33 | 0.32 | 0.31 | 1.30 | | 0.30 | 0.35 | 0.34 | 0.41 |
| 2004-2012 | DCS | Median | 0.38 | 0.42 | 0.36 | 0.36 | 1.30 | 0.91 | 0.39 | 0.45 | 0.45 | 0.49 |
| 2013 | DCS | Median | 0.32 | 0.37 | 0.35 | 0.35 | 1.30 | | 0.36 | 0.41 | 0.40 | 0.51 |
| 2004-2012 | DCS | 75th Percentile | 0.47 | 0.53 | 0.51 | 0.47 | 1.30 | 1.00 | 0.52 | 0.54 | 0.54 | 0.59 |
| 2013 | DCS | 75th Percentile | 0.38 | 0.47 | 0.39 | 0.43 | 1.30 | | 0.46 | 0.50 | 0.46 | 0.53 |
| 2004-2012 | DCS | Count | 57 | 58 | 58 | 58 | 76 | 15 | 60 | 63 | 63 | 69 |
| 2013 | DCS | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | SIO2 | Mean | 5 | 7 | 5 | 4 | 16 | 16 | 14 | 10 | 7 | 5 |
| 2013 | SIO2 | Mean | 2 | 8 | 3 | 3 | 15 | | 12 | 6 | 4 | 5 |
| 2004-2012 | SIO2 | Variance | 16 | 19 | 11 | 9 | 54 | 54 | 47 | 34 | 16 | 4 |
| 2013 | SIO2 | Variance | 1 | 41 | 1 | 1 | 51 | | 52 | 15 | 1 | 2 |
| 2004-2012 | SIO2 | 25th Percentile | 3 | 4 | 3 | 2 | 11 | 9 | 9 | 5 | 5 | 3 |
| 2013 | SIO2 | 25th Percentile | 1 | 2 | 2 | 2 | 8 | | 5 | 3 | 3 | 5 |
| 2004-2012 | SIO2 | Median | 4 | 6 | 4 | 4 | 16 | 17 | 14 | 8 | 7 | 5 |
| 2013 | SIO2 | Median | 2 | 3 | 3 | 2 | 15 | | 8 | 5 | 3 | 5 |
| 2004-2012 | SIO2 | 75th Percentile | 7 | 9 | 6 | 5 | 21 | 23 | 19 | 13 | 9 | 6 |
| 2013 | SIO2 | 75th Percentile | 2 | 13 | 3 | 3 | 20 | | 17 | 8 | 4 | 6 |
| 2004-2012 | SIO2 | Count | 41 | 58 | 43 | 45 | 98 | 33 | 57 | 69 | 69 | 80 |
| 2013 | SIO2 | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 1.0 | 2.8 | 0.5 | 0.3 | 48.5 | 33.0 | 12.9 | 4.1 | 0.8 | 0.2 |
| 2013 | SO4 | Mean | 0.6 | 3.2 | 0.3 | 0.3 | 52.2 | | 11.8 | 1.6 | 0.6 | 0.2 |
| 2004-2012 | SO4 | Variance | 5.7 | 19.9 | 0.5 | 0.0 | 553.4 | 587.3 | 182.7 | 25.9 | 0.4 | 0.0 |
| 2013 | SO4 | Variance | 0.0 | 38.8 | 0.0 | 0.0 | 485.8 | | 225.2 | 1.5 | 0.0 | 0.0 |
| 2004-2012 | SO4 | 25th Percentile | 0.5 | 0.7 | 0.2 | 0.1 | 33.1 | 14.7 | 3.2 | 0.9 | 0.5 | 0.1 |
| 2013 | SO4 | 25th Percentile | 0.5 | 0.7 | 0.2 | 0.2 | 38.5 | | 1.7 | 1.0 | 0.5 | 0.2 |
| 2004-2012 | SO4 | Median | 0.6 | 1.4 | 0.5 | 0.2 | 48.5 | 23.6 | 7.8 | 2.6 | 0.6 | 0.1 |
| 2013 | SO4 | Median | 0.5 | 0.7 | 0.2 | 0.2 | 43.5 | | 1.8 | 1.1 | 0.6 | 0.2 |
| 2004-2012 | SO4 | 75th Percentile | 0.8 | 2.7 | 0.6 | 0.5 | 65.0 | 50.8 | 17.1 | 5.6 | 0.9 | 0.2 |
| 2013 | SO4 | 75th Percentile | 0.6 | 1.5 | 0.5 | 0.3 | 62.7 | | 24.2 | 1.6 | 0.6 | 0.2 |
| 2004-2012 | SO4 | Count | 69 | 73 | 73 | 71 | 98 | 34 | 78 | 82 | 84 | 91 |
| 2013 | SO4 | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | TDEPTH | Mean | 0.24 | 0.28 | 0.25 | 0.24 | 1.20 | 0.49 | 0.28 | 0.33 | 0.32 | 0.36 |
| 2013 | TDEPTH | Mean | 0.24 | 0.27 | 0.24 | 0.23 | NA | | 0.25 | 0.31 | 0.33 | 0.34 |
| 2004-2012 | TDEPTH | Variance | 0.01 | 0.01 | 0.01 | 0.01 | 0.09 | 0.07 | 0.01 | 0.02 | 0.02 | 0.02 |
| 2013 | TDEPTH | Variance | 0.01 | 0.01 | 0.01 | 0.01 | NA | | 0.01 | 0.01 | 0.01 | 0.01 |
| 2004-2012 | TDEPTH | 25th Percentile | 0.17 | 0.19 | 0.17 | 0.16 | 1.30 | 0.30 | 0.19 | 0.25 | 0.22 | 0.27 |
| 2013 | TDEPTH | 25th Percentile | 0.21 | 0.19 | 0.20 | 0.16 | NA | | 0.20 | 0.25 | 0.26 | 0.29 |
| 2004-2012 | TDEPTH | Median | 0.20 | 0.26 | 0.21 | 0.22 | 1.30 | 0.42 | 0.26 | 0.30 | 0.30 | 0.34 |
| 2013 | TDEPTH | Median | 0.21 | 0.25 | 0.24 | 0.23 | NA | | 0.25 | 0.28 | 0.32 | 0.33 |
| 2004-2012 | TDEPTH | 75th Percentile | 0.32 | 0.35 | 0.31 | 0.31 | 1.30 | 0.63 | 0.37 | 0.42 | 0.42 | 0.45 |
| 2013 | TDEPTH | 75th Percentile | 0.26 | 0.33 | 0.29 | 0.29 | NA | | 0.32 | 0.37 | 0.39 | 0.40 |
| 2004-2012 | TDEPTH | Count | 67 | 72 | 70 | 71 | 9 | 29 | 73 | 74 | 71 | 77 |
| 2013 | TDEPTH | Count | 11 | 11 | 11 | 11 | 0 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | TDOC | Mean | 29 | 46 | 24 | 20 | 177 | 169 | 101 | 52 | 30 | 20 |
| 2013 | TDOC | Mean | 27 | 51 | 23 | 19 | 169 | | 99 | 44 | 28 | 20 |
| 2004-2012 | TDOC | Variance | 99 | 431 | 59 | 41 | 2510 | 3803 | 1817 | 777 | 83 | 47 |
| 2013 | TDOC | Variance | 34 | 229 | 27 | 9 | 1543 | | 1377 | 137 | 61 | 18 |
| 2004-2012 | TDOC | 25th Percentile | 23 | 33 | 17 | 15 | 140 | 141 | 69 | 31 | 25 | 16 |
| 2013 | TDOC | 25th Percentile | 23 | 41 | 21 | 17 | 148 | | 74 | 36 | 23 | 17 |
| 2004-2012 | TDOC | Median | 28 | 40 | 24 | 20 | 176 | 176 | 97 | 43 | 30 | 18 |
| 2013 | TDOC | Median | 28 | 44 | 24 | 19 | 168 | | 80 | 46 | 30 | 21 |
| 2004-2012 | TDOC | 75th Percentile | 33 | 53 | 28 | 26 | 204 | 216 | 130 | 66 | 37 | 25 |
| 2013 | TDOC | 75th Percentile | 30 | 60 | 27 | 21 | 181 | | 135 | 52 | 35 | 22 |
| 2004-2012 | TDOC | Count | 41 | 58 | 43 | 45 | 99 | 34 | 57 | 70 | 68 | 81 |
| 2013 | TDOC | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 101 | 146 | 93 | 91 | 491 | 446 | 294 | 159 | 107 | 100 |
| 2013 | TDS | Mean | 91 | 175 | 97 | 86 | 488 | | 279 | 127 | 91 | 94 |
| 2004-2012 | TDS | Variance | 2014 | 5158 | 975 | 779 | 25063 | 37694 | 21450 | 8113 | 839 | 1049 |
| 2013 | TDS | Variance | 302 | 6199 | 260 | 112 | 13079 | | 17377 | 2275 | 483 | 531 |
| 2004-2012 | TDS | 25th Percentile | 70 | 101 | 69 | 72 | 396 | 341 | 160 | 97 | 85 | 78 |
| 2013 | TDS | 25th Percentile | 74 | 120 | 87 | 81 | 416 | | 167 | 93 | 72 | 78 |
| 2004-2012 | TDS | Median | 92 | 125 | 86 | 89 | 500 | 450 | 270 | 122 | 99 | 94 |
| 2013 | TDS | Median | 89 | 143 | 95 | 92 | 492 | | 213 | 120 | 94 | 92 |
| 2004-2012 | TDS | 75th Percentile | 113 | 181 | 112 | 104 | 605 | 560 | 405 | 200 | 125 | 117 |
| 2013 | TDS | 75th Percentile | 102 | 230 | 104 | 93 | 561 | | 394 | 144 | 109 | 109 |
| 2004-2012 | TDS | Count | 41 | 58 | 43 | 45 | 99 | 34 | 57 | 70 | 69 | 81 |
| 2013 | TDS | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |
| 2004-2012 | TOC | Mean | 17 | 20 | 18 | 19 | 30 | 29 | 26 | 20 | 19 | 18 |
| 2013 | TOC | Mean | 17 | 22 | 18 | 18 | 28 | | 26 | 18 | 17 | 17 |
| 2004-2012 | TOC | Variance | 18 | 25 | 23 | 23 | 49 | 39 | 39 | 37 | 33 | 17 |
| 2013 | TOC | Variance | 22 | 28 | 15 | 17 | 44 | | 30 | 22 | 38 | 32 |
| 2004-2012 | TOC | 25th Percentile | 15 | 17 | 15 | 16 | 25 | 26 | 21 | 16 | 16 | 15 |
| 2013 | TOC | 25th Percentile | 14 | 19 | 16 | 18 | 23 | | 22 | 14 | 12 | 13 |
| 2004-2012 | TOC | Median | 16 | 19 | 17 | 18 | 30 | 30 | 26 | 18 | 18 | 17 |
| 2013 | TOC | Median | 16 | 21 | 17 | 18 | 27 | | 25 | 18 | 14 | 15 |
| 2004-2012 | TOC | 75th Percentile | 19 | 21 | 20 | 20 | 34 | 33 | 31 | 22 | 21 | 20 |
| 2013 | TOC | 75th Percentile | 19 | 24 | 19 | 18 | 33 | | 30 | 21 | 22 | 22 |
| 2004-2012 | TOC | Count | 40 | 57 | 42 | 45 | 97 | 33 | 55 | 68 | 67 | 79 |
| 2013 | TOC | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |
| 2004-2012 | DO | Mean | 4.1 | 3.2 | 4.3 | 3.7 | 4.9 | 1.4 | 2.1 | 3.0 | 4.5 | 5.6 |
| 2013 | DO | Mean | 2.7 | 1.7 | 3.8 | 2.9 | 5.5 | | 1.2 | 2.0 | 4.1 | 4.7 |
| 2004-2012 | DO | Variance | 3.3 | 2.5 | 3.4 | 3.8 | 3.5 | 0.6 | 2.7 | 2.0 | 3.2 | 4.1 |
| 2013 | DO | Variance | 2.7 | 0.4 | 3.8 | 2.7 | 1.2 | | 0.8 | 1.4 | 3.9 | 7.4 |
| 2004-2012 | DO | 25th Percentile | 2.9 | 1.9 | 2.9 | 2.3 | 3.6 | 0.7 | 1.1 | 2.0 | 3.5 | 4.1 |
| 2013 | DO | 25th Percentile | 1.6 | 1.2 | 2.1 | 1.8 | 4.8 | | 0.6 | 1.3 | 3.0 | 2.0 |
| 2004-2012 | DO | Median | 3.7 | 2.8 | 4.0 | 3.4 | 4.8 | 1.4 | 1.5 | 2.7 | 4.4 | 5.6 |
| 2013 | DO | Median | 2.4 | 1.4 | 3.6 | 2.9 | 5.7 | | 0.9 | 1.9 | 3.8 | 4.7 |
| 2004-2012 | DO | 75th Percentile | 5.0 | 4.0 | 5.4 | 4.8 | 6.2 | 1.9 | 2.5 | 3.6 | 5.7 | 6.9 |
| 2013 | DO | 75th Percentile | 3.8 | 2.0 | 5.3 | 3.5 | 6.1 | | 1.8 | 3.0 | 5.6 | 7.0 |
| 2004-2012 | DO | Count | 69 | 73 | 74 | 74 | 95 | 32 | 76 | 81 | 82 | 89 |
| 2013 | DO | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 5 | 7 | 5 | 5 | 20 | 20 | 8 | 6 | 5 | 5 |
| 2013 | OPO4 | Mean | 2 | 3 | 3 | 2 | 9 | | 5 | 3 | 2 | 3 |
| 2004-2012 | OPO4 | Variance | 41 | 202 | 43 | 78 | 1018 | 1040 | 172 | 84 | 80 | 28 |
| 2013 | OPO4 | Variance | 0 | 1 | 5 | 0 | 149 | | 15 | 4 | 1 | 1 |
| 2004-2012 | OPO4 | 25th Percentile | 3 | 3 | 2 | 3 | 4 | 4 | 3 | 3 | 3 | 3 |
| 2013 | OPO4 | 25th Percentile | 2 | 2 | 2 | 2 | 3 | | 3 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Median | 3 | 4 | 3 | 3 | 8 | 7 | 4 | 4 | 3 | 3 |
| 2013 | OPO4 | Median | 2 | 3 | 2 | 2 | 6 | | 4 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | 75th Percentile | 4 | 4 | 4 | 4 | 16 | 13 | 6 | 5 | 4 | 4 |
| 2013 | OPO4 | 75th Percentile | 2 | 4 | 3 | 2 | 9 | | 6 | 3 | 2 | 3 |
| 2004-2012 | OPO4 | Count | 40 | 55 | 42 | 45 | 93 | 30 | 56 | 67 | 67 | 77 |
| 2013 | OPO4 | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |
| 2004-2012 | PH | Mean | 6.6 | 6.7 | 6.7 | 6.7 | 7.6 | 7.1 | 6.8 | 6.7 | 6.7 | 6.7 |
| 2013 | PH | Mean | 6.3 | 6.4 | 6.4 | 6.3 | 7.5 | | 6.5 | 6.3 | 6.5 | 6.3 |
| 2004-2012 | PH | Variance | 0.2 | 0.2 | 0.3 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 |
| 2013 | PH | Variance | 0.2 | 0.1 | 0.2 | 0.2 | 0.0 | | 0.1 | 0.1 | 0.1 | 0.2 |
| 2004-2012 | PH | 25th Percentile | 6.3 | 6.5 | 6.4 | 6.3 | 7.5 | 7.0 | 6.5 | 6.4 | 6.4 | 6.4 |
| 2013 | PH | 25th Percentile | 6.1 | 6.2 | 6.2 | 6.0 | 7.3 | | 6.3 | 6.1 | 6.2 | 6.0 |
| 2004-2012 | PH | Median | 6.5 | 6.6 | 6.6 | 6.5 | 7.6 | 7.2 | 6.8 | 6.6 | 6.6 | 6.6 |
| 2013 | PH | Median | 6.3 | 6.5 | 6.4 | 6.2 | 7.5 | | 6.5 | 6.3 | 6.6 | 6.3 |
| 2004-2012 | PH | 75th Percentile | 6.8 | 6.9 | 7.0 | 6.9 | 7.8 | 7.2 | 7.0 | 6.9 | 6.9 | 7.0 |
| 2013 | PH | 75th Percentile | 6.4 | 6.6 | 6.6 | 6.4 | 7.6 | | 6.7 | 6.5 | 6.7 | 6.5 |
| 2004-2012 | PH | Count | 71 | 76 | 77 | 77 | 96 | 33 | 77 | 81 | 82 | 89 |
| 2013 | PH | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | SPCOND | Mean | 131 | 206 | 125 | 117 | 772 | 682 | 418 | 231 | 133 | 132 |
| 2013 | SPCOND | Mean | 204 | 202 | 193 | 118 | 770 | | 349 | 185 | 121 | 109 |
| 2004-2012 | SPCOND | Variance | 3262 | 16178 | 2275 | 1456 | 59235 | 79141 | 50499 | 21753 | 2184 | 3197 |
| 2013 | SPCOND | Variance | 66069 | 16199 | 56676 | 838 | 29546 | | 51694 | 5380 | 1760 | 732 |
| 2004-2012 | SPCOND | 25th Percentile | 95 | 121 | 91 | 90 | 624 | 556 | 231 | 124 | 104 | 99 |
| 2013 | SPCOND | 25th Percentile | 111 | 115 | 96 | 93 | 676 | | 203 | 136 | 83 | 88 |
| 2004-2012 | SPCOND | Median | 114 | 160 | 113 | 115 | 785 | 700 | 378 | 163 | 120 | 114 |
| 2013 | SPCOND | Median | 129 | 149 | 123 | 115 | 773 | | 260 | 189 | 114 | 109 |
| 2004-2012 | SPCOND | 75th Percentile | 151 | 252 | 140 | 130 | 965 | 861 | 608 | 290 | 158 | 149 |
| 2013 | SPCOND | 75th Percentile | 157 | 237 | 148 | 141 | 899 | | 572 | 212 | 152 | 129 |
| 2004-2012 | SPCOND | Count | 70 | 76 | 76 | 76 | 96 | 33 | 77 | 81 | 80 | 87 |
| 2013 | SPCOND | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 23 | 24 | 24 | 24 | 25 | 23 | 23 | 23 | 24 | 25 |
| 2013 | TEMP | Mean | 24 | 23 | 24 | 24 | 26 | | 23 | 24 | 25 | 24 |
| 2004-2012 | TEMP | Variance | 21 | 22 | 22 | 20 | 16 | 16 | 21 | 20 | 21 | 17 |
| 2013 | TEMP | Variance | 14 | 12 | 15 | 18 | 15 | | 13 | 12 | 14 | 13 |
| 2004-2012 | TEMP | 25th Percentile | 21 | 21 | 21 | 21 | 22 | 20 | 20 | 21 | 22 | 22 |
| 2013 | TEMP | 25th Percentile | 21 | 21 | 22 | 21 | 23 | | 21 | 21 | 23 | 23 |
| 2004-2012 | TEMP | Median | 24 | 25 | 24 | 25 | 26 | 22 | 22 | 23 | 24 | 26 |
| 2013 | TEMP | Median | 23 | 22 | 24 | 23 | 25 | | 22 | 23 | 24 | 24 |
| 2004-2012 | TEMP | 75th Percentile | 27 | 28 | 27 | 27 | 29 | 27 | 26 | 27 | 28 | 28 |
| 2013 | TEMP | 75th Percentile | 27 | 26 | 28 | 28 | 29 | | 26 | 27 | 28 | 28 |
| 2004-2012 | TEMP | Count | 71 | 76 | 77 | 77 | 97 | 34 | 77 | 82 | 83 | 90 |
| 2013 | TEMP | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | TN | Mean | 1.0 | 1.1 | 1.0 | 1.0 | 1.8 | 2.0 | 1.2 | 1.0 | 1.1 | 1.3 |
| 2013 | TN | Mean | 0.9 | 1.1 | 1.1 | 1.0 | 1.7 | | 1.2 | 0.9 | 1.0 | 1.1 |
| 2004-2012 | TN | Variance | 0.2 | 0.1 | 0.1 | 0.1 | 0.3 | 0.4 | 0.1 | 0.1 | 1.0 | 0.8 |
| 2013 | TN | Variance | 0.0 | 0.0 | 0.0 | 0.0 | 0.4 | | 0.1 | 0.0 | 0.0 | 0.1 |
| 2004-2012 | TN | 25th Percentile | 0.7 | 0.9 | 0.8 | 0.9 | 1.5 | 1.7 | 0.9 | 0.8 | 0.8 | 1.0 |
| 2013 | TN | 25th Percentile | 0.8 | 1.1 | 1.0 | 1.0 | 1.3 | | 1.1 | 0.8 | 0.8 | 0.9 |
| 2004-2012 | TN | Median | 0.9 | 1.0 | 1.0 | 1.0 | 1.8 | 2.0 | 1.1 | 0.9 | 1.0 | 1.1 |
| 2013 | TN | Median | 0.9 | 1.1 | 1.1 | 1.0 | 1.4 | | 1.2 | 0.9 | 1.0 | 1.0 |
| 2004-2012 | TN | 75th Percentile | 1.1 | 1.2 | 1.1 | 1.2 | 2.1 | 2.3 | 1.6 | 1.1 | 1.2 | 1.4 |
| 2013 | TN | 75th Percentile | 1.0 | 1.2 | 1.1 | 1.1 | 1.9 | | 1.3 | 1.0 | 1.1 | 1.3 |
| 2004-2012 | TN | Count | 39 | 57 | 41 | 43 | 97 | 32 | 55 | 68 | 68 | 81 |
| 2013 | TN | Count | 9 | 7 | 8 | 6 | 12 | 0 | 9 | 12 | 11 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA111 | LOXA112 | LOXA113 | LOXA114 | LOXA115 | LOXA116 | LOXA117 | LOXA118 | LOXA119 | LOXA120 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 8 | 9 | 7 | 7 | 43 | 56 | 16 | 9 | 10 | 10 |
| 2013 | TP | Mean | 5 | 8 | 6 | 7 | 30 | | 12 | 7 | 7 | 6 |
| 2004-2012 | TP | Variance | 43 | 18 | 23 | 41 | 1370 | 1804 | 112 | 54 | 116 | 230 |
| 2013 | TP | Variance | 3 | 18 | 10 | 35 | 365 | | 15 | 3 | 2 | 2 |
| 2004-2012 | TP | 25th Percentile | 5 | 6 | 5 | 4 | 23 | 24 | 10 | 6 | 5 | 5 |
| 2013 | TP | 25th Percentile | 4 | 6 | 4 | 5 | 19 | | 9 | 6 | 6 | 4 |
| 2004-2012 | TP | Median | 7 | 8 | 6 | 6 | 32 | 47 | 13 | 8 | 7 | 7 |
| 2013 | TP | Median | 5 | 6 | 5 | 6 | 24 | | 13 | 8 | 7 | 5 |
| 2004-2012 | TP | 75th Percentile | 9 | 11 | 8 | 8 | 48 | 73 | 19 | 10 | 9 | 9 |
| 2013 | TP | 75th Percentile | 6 | 9 | 7 | 7 | 33 | | 16 | 9 | 8 | 7 |
| 2004-2012 | TP | Count | 71 | 76 | 77 | 76 | 99 | 34 | 79 | 84 | 85 | 91 |
| 2013 | TP | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |
| 2004-2012 | TSS | Mean | 4.4 | 3.4 | 3.4 | 3.5 | 4.7 | 10.1 | 3.4 | 4.0 | 4.6 | 6.2 |
| 2013 | TSS | Mean | 5.0 | 5.0 | 5.0 | 5.0 | 5.8 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Variance | 27.1 | 2.2 | 3.0 | 3.5 | 19.3 | 140.5 | 5.0 | 24.5 | 97.9 | 332.8 |
| 2013 | TSS | Variance | 0.0 | 0.0 | 0.0 | 0.0 | 5.3 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2004-2012 | TSS | 25th Percentile | 1.6 | 2.0 | 1.6 | 1.7 | 3.0 | 3.0 | 1.6 | 1.9 | 1.9 | 2.0 |
| 2013 | TSS | 25th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Median | 3.5 | 3.0 | 3.0 | 3.0 | 4.8 | 3.8 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | Median | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | 75th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 11.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2013 | TSS | 75th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Count | 65 | 71 | 64 | 66 | 98 | 34 | 68 | 76 | 76 | 86 |
| 2013 | TSS | Count | 11 | 11 | 11 | 11 | 12 | 0 | 12 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 204 | 122 | 132 | 39 | 84 | 21 | 17 | 156 | 97 | 52 |
| 2013 | ALK | Mean | | 79 | | 39 | 57 | 20 | 23 | 152 | 76 | 47 |
| 2004-2012 | ALK | Variance | 537 | 2921 | 1998 | 292 | 1766 | 89 | 100 | 1825 | 1767 | 962 |
| 2013 | ALK | Variance | | 832 | | 49 | 1672 | 17 | 131 | 2096 | 438 | 169 |
| 2004-2012 | ALK | 25th Percentile | 193 | 83 | 112 | 28 | 51 | 14 | 13 | 123 | 65 | 34 |
| 2013 | ALK | 25th Percentile | | 62 | | 34 | 34 | 16 | 16 | 122 | 59 | 35 |
| 2004-2012 | ALK | Median | 200 | 120 | 119 | 35 | 72 | 20 | 15 | 146 | 82 | 44 |
| 2013 | ALK | Median | | 77 | | 35 | 45 | 21 | 22 | 145 | 82 | 47 |
| 2004-2012 | ALK | 75th Percentile | 216 | 160 | 133 | 46 | 112 | 23 | 18 | 188 | 124 | 61 |
| 2013 | ALK | 75th Percentile | | 89 | | 40 | 47 | 23 | 25 | 185 | 89 | 58 |
| 2004-2012 | ALK | Count | 5 | 60 | 9 | 60 | 66 | 50 | 35 | 99 | 69 | 64 |
| 2013 | ALK | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |
| 2004-2012 | CA | Mean | 67 | 39 | 41 | 17 | 29 | 8 | 6 | 55 | 33 | 17 |
| 2013 | CA | Mean | | 24 | | 14 | 18 | 7 | 6 | 51 | 24 | 14 |
| 2004-2012 | CA | Variance | 84 | 356 | 236 | 63 | 237 | 9 | 2 | 254 | 233 | 57 |
| 2013 | CA | Variance | | 87 | | 11 | 217 | 1 | 2 | 257 | 59 | 19 |
| 2004-2012 | CA | 25th Percentile | 66 | 23 | 34 | 11 | 17 | 7 | 5 | 44 | 21 | 11 |
| 2013 | CA | 25th Percentile | | 19 | | 12 | 10 | 6 | 5 | 41 | 18 | 11 |
| 2004-2012 | CA | Median | 68 | 41 | 36 | 14 | 26 | 8 | 5 | 53 | 29 | 15 |
| 2013 | CA | Median | | 22 | | 13 | 14 | 7 | 6 | 48 | 26 | 13 |
| 2004-2012 | CA | 75th Percentile | 73 | 51 | 39 | 19 | 39 | 9 | 7 | 65 | 40 | 20 |
| 2013 | CA | 75th Percentile | | 27 | | 14 | 14 | 7 | 6 | 62 | 29 | 18 |
| 2004-2012 | CA | Count | 5 | 60 | 10 | 60 | 66 | 50 | 34 | 98 | 68 | 64 |
| 2013 | CA | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |
| 2004-2012 | CL | Mean | 100 | 58 | 65 | 35 | 56 | 23 | 19 | 96 | 57 | 34 |
| 2013 | CL | Mean | | 36 | | 26 | 36 | 17 | 18 | 111 | 42 | 27 |
| 2004-2012 | CL | Variance | 1609 | 1024 | 858 | 462 | 937 | 88 | 41 | 1822 | 1109 | 330 |
| 2013 | CL | Variance | | 616 | | 129 | 1384 | 19 | 32 | 3565 | 465 | 142 |
| 2004-2012 | CL | 25th Percentile | 78 | 30 | 60 | 21 | 30 | 17 | 15 | 66 | 29 | 20 |
| 2013 | CL | 25th Percentile | | 20 | | 17 | 12 | 13 | 14 | 66 | 25 | 15 |
| 2004-2012 | CL | Median | 98 | 55 | 66 | 28 | 52 | 22 | 19 | 95 | 48 | 30 |
| 2013 | CL | Median | | 35 | | 26 | 25 | 18 | 19 | 96 | 43 | 24 |
| 2004-2012 | CL | 75th Percentile | 125 | 81 | 67 | 42 | 79 | 28 | 24 | 116 | 83 | 45 |
| 2013 | CL | 75th Percentile | | 35 | | 29 | 27 | 20 | 21 | 143 | 55 | 37 |
| 2004-2012 | CL | Count | 10 | 77 | 13 | 83 | 81 | 75 | 68 | 99 | 83 | 80 |
| 2013 | CL | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | NA | 0.41 | NA | 0.48 | 0.45 | 0.43 | 0.34 | 1.30 | 0.39 | 0.39 |
| 2013 | DCS | Mean | | 0.38 | | 0.43 | 0.44 | 0.41 | 0.32 | 1.06 | 0.39 | 0.38 |
| 2004-2012 | DCS | Variance | NA | 0.02 | NA | 0.02 | 0.02 | 0.02 | 0.01 | | 0.02 | 0.02 |
| 2013 | DCS | Variance | | 0.01 | | 0.01 | 0.01 | 0.01 | 0.01 | 0.28 | 0.01 | 0.01 |
| 2004-2012 | DCS | 25th Percentile | NA | 0.32 | NA | 0.37 | 0.37 | 0.32 | 0.27 | 1.30 | 0.30 | 0.29 |
| 2013 | DCS | 25th Percentile | | 0.30 | | 0.36 | 0.38 | 0.35 | 0.27 | 1.30 | 0.34 | 0.30 |
| 2004-2012 | DCS | Median | NA | 0.40 | NA | 0.47 | 0.42 | 0.41 | 0.32 | 1.30 | 0.35 | 0.35 |
| 2013 | DCS | Median | | 0.39 | | 0.41 | 0.42 | 0.40 | 0.31 | 1.30 | 0.35 | 0.38 |
| 2004-2012 | DCS | 75th Percentile | NA | 0.49 | NA | 0.58 | 0.55 | 0.51 | 0.42 | 1.30 | 0.48 | 0.45 |
| 2013 | DCS | 75th Percentile | | 0.46 | | 0.49 | 0.52 | 0.46 | 0.38 | 1.30 | 0.42 | 0.42 |
| 2004-2012 | DCS | Count | | 60 | | 68 | 60 | 54 | 55 | 75 | 69 | 61 |
| 2013 | DCS | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |
| 2004-2012 | SIO2 | Mean | 16 | 12 | 15 | 5 | 8 | 6 | 4 | 9 | 9 | 7 |
| 2013 | SIO2 | Mean | | 9 | | 6 | 6 | 6 | 3 | 8 | 6 | 5 |
| 2004-2012 | SIO2 | Variance | 22 | 30 | 11 | 12 | 28 | 9 | 5 | 21 | 26 | 26 |
| 2013 | SIO2 | Variance | | 25 | | 18 | 76 | 2 | 1 | 17 | 9 | 6 |
| 2004-2012 | SIO2 | 25th Percentile | 15 | 9 | 13 | 2 | 5 | 4 | 2 | 6 | 4 | 4 |
| 2013 | SIO2 | 25th Percentile | | 5 | | 3 | 1 | 5 | 3 | 4 | 4 | 4 |
| 2004-2012 | SIO2 | Median | 17 | 12 | 15 | 4 | 7 | 6 | 4 | 9 | 8 | 7 |
| 2013 | SIO2 | Median | | 9 | | 3 | 2 | 6 | 3 | 7 | 5 | 6 |
| 2004-2012 | SIO2 | 75th Percentile | 20 | 16 | 16 | 8 | 11 | 7 | 4 | 12 | 12 | 10 |
| 2013 | SIO2 | 75th Percentile | | 12 | | 8 | 6 | 7 | 3 | 12 | 7 | 7 |
| 2004-2012 | SIO2 | Count | 5 | 60 | 9 | 60 | 66 | 50 | 35 | 99 | 69 | 64 |
| 2013 | SIO2 | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 48.0 | 12.3 | 17.3 | 1.5 | 7.8 | 0.4 | 0.2 | 26.5 | 6.3 | 2.0 |
| 2013 | SO4 | Mean | | 4.1 | | 0.6 | 4.2 | 0.3 | 0.2 | 25.7 | 2.8 | 0.6 |
| 2004-2012 | SO4 | Variance | 612.2 | 188.6 | 207.3 | 6.8 | 114.3 | 0.9 | 0.0 | 342.4 | 76.8 | 13.7 |
| 2013 | SO4 | Variance | | 33.2 | | 0.1 | 81.5 | 0.0 | 0.0 | 322.3 | 26.0 | 0.0 |
| 2004-2012 | SO4 | 25th Percentile | 39.9 | 3.3 | 10.3 | 0.4 | 1.1 | 0.1 | 0.1 | 11.6 | 1.2 | 0.6 |
| 2013 | SO4 | 25th Percentile | | 1.3 | | 0.5 | 0.7 | 0.2 | 0.2 | 13.2 | 0.9 | 0.5 |
| 2004-2012 | SO4 | Median | 45.3 | 7.1 | 13.8 | 0.6 | 3.1 | 0.2 | 0.1 | 22.0 | 2.4 | 0.8 |
| 2013 | SO4 | Median | | 1.8 | | 0.5 | 0.7 | 0.2 | 0.2 | 17.8 | 1.0 | 0.6 |
| 2004-2012 | SO4 | 75th Percentile | 48.6 | 15.7 | 18.1 | 1.1 | 9.3 | 0.5 | 0.2 | 36.5 | 6.2 | 1.5 |
| 2013 | SO4 | 75th Percentile | | 2.5 | | 0.5 | 0.9 | 0.3 | 0.2 | 41.9 | 1.5 | 0.6 |
| 2004-2012 | SO4 | Count | 10 | 77 | 13 | 83 | 81 | 74 | 68 | 99 | 83 | 80 |
| 2013 | SO4 | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |
| 2004-2012 | TDEPTH | Mean | 0.21 | 0.29 | 0.29 | 0.30 | 0.31 | 0.27 | 0.21 | 1.08 | 0.31 | 0.29 |
| 2013 | TDEPTH | Mean | | 0.23 | | 0.21 | 0.30 | 0.26 | 0.20 | NA | 0.30 | 0.30 |
| 2004-2012 | TDEPTH | Variance | 0.01 | 0.02 | 0.03 | 0.02 | 0.01 | 0.01 | 0.01 | 0.21 | 0.01 | 0.01 |
| 2013 | TDEPTH | Variance | | 0.00 | | 0.00 | 0.00 | 0.00 | 0.00 | NA | 0.01 | 0.01 |
| 2004-2012 | TDEPTH | 25th Percentile | 0.14 | 0.19 | 0.14 | 0.19 | 0.21 | 0.19 | 0.14 | 1.30 | 0.23 | 0.21 |
| 2013 | TDEPTH | 25th Percentile | | 0.18 | | 0.17 | 0.24 | 0.23 | 0.17 | NA | 0.25 | 0.25 |
| 2004-2012 | TDEPTH | Median | 0.15 | 0.28 | 0.28 | 0.29 | 0.32 | 0.25 | 0.19 | 1.30 | 0.29 | 0.28 |
| 2013 | TDEPTH | Median | | 0.23 | | 0.21 | 0.26 | 0.25 | 0.19 | NA | 0.27 | 0.29 |
| 2004-2012 | TDEPTH | 75th Percentile | 0.29 | 0.37 | 0.39 | 0.39 | 0.37 | 0.35 | 0.25 | 1.30 | 0.36 | 0.35 |
| 2013 | TDEPTH | 75th Percentile | | 0.28 | | 0.23 | 0.35 | 0.29 | 0.23 | NA | 0.33 | 0.34 |
| 2004-2012 | TDEPTH | Count | 11 | 78 | 14 | 80 | 78 | 73 | 60 | 10 | 73 | 71 |
| 2013 | TDEPTH | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 0 | 10 | 10 |
| 2004-2012 | TDOC | Mean | 204 | 122 | 132 | 39 | 84 | 21 | 17 | 156 | 97 | 52 |
| 2013 | TDOC | Mean | | 79 | | 39 | 57 | 20 | 23 | 152 | 76 | 47 |
| 2004-2012 | TDOC | Variance | 537 | 2921 | 1998 | 292 | 1766 | 89 | 100 | 1825 | 1767 | 962 |
| 2013 | TDOC | Variance | | 832 | | 49 | 1672 | 17 | 131 | 2096 | 438 | 169 |
| 2004-2012 | TDOC | 25th Percentile | 193 | 83 | 112 | 28 | 51 | 14 | 13 | 123 | 65 | 34 |
| 2013 | TDOC | 25th Percentile | | 62 | | 34 | 34 | 16 | 16 | 122 | 59 | 35 |
| 2004-2012 | TDOC | Median | 200 | 120 | 119 | 35 | 72 | 20 | 15 | 146 | 82 | 44 |
| 2013 | TDOC | Median | | 77 | | 35 | 45 | 21 | 22 | 145 | 82 | 47 |
| 2004-2012 | TDOC | 75th Percentile | 216 | 160 | 133 | 46 | 112 | 23 | 18 | 188 | 124 | 61 |
| 2013 | TDOC | 75th Percentile | | 89 | | 40 | 47 | 23 | 25 | 185 | 89 | 58 |
| 2004-2012 | TDOC | Count | 5 | 60 | 9 | 60 | 66 | 50 | 35 | 99 | 69 | 64 |
| 2013 | TDOC | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 496 | 302 | 338 | 134 | 244 | 104 | 89 | 416 | 258 | 161 |
| 2013 | TDS | Mean | | 198 | | 130 | 169 | 85 | 95 | 419 | 194 | 144 |
| 2004-2012 | TDS | Variance | 2010 | 20099 | 19902 | 3267 | 13275 | 849 | 427 | 18030 | 13000 | 4468 |
| 2013 | TDS | Variance | | 8749 | | 1448 | 16621 | 261 | 766 | 28339 | 3321 | 1736 |
| 2004-2012 | TDS | 25th Percentile | 478 | 172 | 279 | 97 | 150 | 83 | 76 | 320 | 166 | 115 |
| 2013 | TDS | 25th Percentile | | 132 | | 104 | 101 | 68 | 91 | 299 | 160 | 113 |
| 2004-2012 | TDS | Median | 503 | 299 | 303 | 120 | 235 | 110 | 84 | 400 | 230 | 147 |
| 2013 | TDS | Median | | 176 | | 113 | 127 | 90 | 92 | 413 | 199 | 143 |
| 2004-2012 | TDS | 75th Percentile | 506 | 403 | 331 | 151 | 318 | 123 | 100 | 510 | 342 | 199 |
| 2013 | TDS | 75th Percentile | | 221 | | 142 | 138 | 99 | 107 | 535 | 224 | 174 |
| 2004-2012 | TDS | Count | 5 | 60 | 10 | 60 | 66 | 50 | 35 | 99 | 69 | 64 |
| 2013 | TDS | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |
| 2004-2012 | TOC | Mean | 31 | 25 | 24 | 19 | 21 | 21 | 20 | 26 | 24 | 23 |
| 2013 | TOC | Mean | | 24 | | 19 | 20 | 19 | 22 | 24 | 20 | 22 |
| 2004-2012 | TOC | Variance | 3 | 30 | 16 | 10 | 21 | 17 | 24 | 35 | 34 | 32 |
| 2013 | TOC | Variance | | 55 | | 17 | 35 | 34 | 89 | 44 | 23 | 63 |
| 2004-2012 | TOC | 25th Percentile | 30 | 21 | 22 | 17 | 17 | 17 | 17 | 21 | 19 | 18 |
| 2013 | TOC | 25th Percentile | | 18 | | 17 | 14 | 15 | 16 | 19 | 17 | 17 |
| 2004-2012 | TOC | Median | 31 | 25 | 23 | 19 | 21 | 21 | 19 | 25 | 23 | 22 |
| 2013 | TOC | Median | | 23 | | 18 | 18 | 17 | 17 | 24 | 21 | 18 |
| 2004-2012 | TOC | 75th Percentile | 31 | 29 | 26 | 20 | 25 | 24 | 22 | 30 | 29 | 26 |
| 2013 | TOC | 75th Percentile | | 30 | | 23 | 25 | 21 | 29 | 30 | 21 | 25 |
| 2004-2012 | TOC | Count | 5 | 58 | 10 | 60 | 66 | 50 | 35 | 99 | 69 | 64 |
| 2013 | TOC | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |
| 2004-2012 | DO | Mean | 0.9 | 2.0 | 1.6 | 2.2 | 3.5 | 4.3 | 4.9 | 3.8 | 2.5 | 4.9 |
| 2013 | DO | Mean | | 1.2 | | 1.3 | 2.6 | 1.9 | 2.8 | 2.9 | 1.7 | 3.6 |
| 2004-2012 | DO | Variance | 0.4 | 2.8 | 1.4 | 2.2 | 4.0 | 4.4 | 4.0 | 3.8 | 2.2 | 4.9 |
| 2013 | DO | Variance | | 0.3 | | 0.8 | 2.2 | 0.9 | 2.8 | 1.8 | 1.1 | 6.6 |
| 2004-2012 | DO | 25th Percentile | 0.5 | 1.0 | 0.8 | 1.2 | 1.9 | 2.8 | 3.6 | 2.4 | 1.5 | 3.4 |
| 2013 | DO | 25th Percentile | | 0.8 | | 0.7 | 1.8 | 1.1 | 1.5 | 2.1 | 0.6 | 2.0 |
| 2004-2012 | DO | Median | 0.7 | 1.5 | 1.1 | 1.9 | 3.2 | 4.3 | 4.7 | 3.6 | 2.3 | 4.3 |
| 2013 | DO | Median | | 1.4 | | 1.1 | 2.1 | 1.6 | 2.7 | 2.8 | 1.8 | 3.5 |
| 2004-2012 | DO | 75th Percentile | 1.0 | 2.4 | 2.1 | 2.6 | 4.5 | 5.5 | 6.0 | 5.2 | 3.2 | 6.1 |
| 2013 | DO | 75th Percentile | | 1.6 | | 1.7 | 3.2 | 2.6 | 4.1 | 3.7 | 2.5 | 4.3 |
| 2004-2012 | DO | Count | 10 | 77 | 12 | 78 | 78 | 72 | 68 | 95 | 79 | 75 |
| 2013 | DO | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 39 | 6 | 4 | 9 | 6 | 6 | 5 | 22 | 8 | 6 |
| 2013 | OPO4 | Mean | | 4 | | 3 | 4 | 3 | 2 | 11 | 3 | 3 |
| 2004-2012 | OPO4 | Variance | 1629 | 117 | 0 | 404 | 73 | 80 | 32 | 2880 | 537 | 78 |
| 2013 | OPO4 | Variance | | 20 | | 1 | 13 | 4 | 0 | 72 | 3 | 2 |
| 2004-2012 | OPO4 | 25th Percentile | 14 | 3 | 4 | 3 | 3 | 3 | 3 | 4 | 3 | 3 |
| 2013 | OPO4 | 25th Percentile | | 3 | | 2 | 2 | 2 | 2 | 7 | 2 | 2 |
| 2004-2012 | OPO4 | Median | 22 | 3 | 4 | 4 | 3 | 3 | 4 | 7 | 3 | 4 |
| 2013 | OPO4 | Median | | 3 | | 3 | 2 | 3 | 2 | 9 | 2 | 3 |
| 2004-2012 | OPO4 | 75th Percentile | 39 | 5 | 5 | 5 | 4 | 6 | 5 | 17 | 4 | 5 |
| 2013 | OPO4 | 75th Percentile | | 3 | | 4 | 3 | 3 | 3 | 12 | 3 | 4 |
| 2004-2012 | OPO4 | Count | 5 | 59 | 10 | 56 | 63 | 47 | 36 | 93 | 66 | 61 |
| 2013 | OPO4 | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |
| 2004-2012 | PH | Mean | 7.0 | 6.9 | 7.1 | 6.7 | 7.0 | 6.7 | 6.5 | 7.3 | 6.8 | 6.9 |
| 2013 | PH | Mean | | 6.5 | | 6.0 | 6.6 | 6.3 | 6.2 | 7.2 | 6.5 | 6.6 |
| 2004-2012 | PH | Variance | 0.0 | 0.1 | 0.0 | 0.2 | 0.2 | 0.2 | 0.1 | 0.4 | 0.1 | 0.1 |
| 2013 | PH | Variance | | 0.0 | | 0.2 | 0.2 | 0.2 | 0.2 | 0.0 | 0.1 | 0.2 |
| 2004-2012 | PH | 25th Percentile | 7.0 | 6.6 | 6.9 | 6.3 | 6.7 | 6.3 | 6.2 | 7.2 | 6.7 | 6.6 |
| 2013 | PH | 25th Percentile | | 6.3 | | 5.8 | 6.2 | 6.0 | 5.9 | 7.1 | 6.3 | 6.5 |
| 2004-2012 | PH | Median | 7.1 | 6.9 | 7.1 | 6.6 | 6.9 | 6.6 | 6.4 | 7.3 | 6.8 | 6.8 |
| 2013 | PH | Median | | 6.5 | | 6.0 | 6.6 | 6.2 | 6.0 | 7.2 | 6.6 | 6.6 |
| 2004-2012 | PH | 75th Percentile | 7.1 | 7.1 | 7.2 | 7.0 | 7.1 | 6.9 | 6.7 | 7.5 | 7.0 | 7.1 |
| 2013 | PH | 75th Percentile | | 6.6 | | 6.1 | 6.9 | 6.4 | 6.3 | 7.3 | 6.7 | 6.8 |
| 2004-2012 | PH | Count | 10 | 78 | 13 | 81 | 80 | 74 | 69 | 97 | 82 | 78 |
| 2013 | PH | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |
| 2004-2012 | SPCOND | Mean | 777 | 451 | 487 | 203 | 357 | 127 | 110 | 668 | 393 | 208 |
| 2013 | SPCOND | Mean | | 267 | | 139 | 234 | 103 | 105 | 688 | 284 | 181 |
| 2004-2012 | SPCOND | Variance | 76255 | 50324 | 34917 | 11413 | 36054 | 1379 | 722 | 45790 | 35708 | 10729 |
| 2013 | SPCOND | Variance | | 19761 | | 5051 | 44478 | 351 | 549 | 75871 | 11816 | 3875 |
| 2004-2012 | SPCOND | 25th Percentile | 666 | 249 | 444 | 134 | 201 | 99 | 89 | 510 | 233 | 130 |
| 2013 | SPCOND | 25th Percentile | | 186 | | 103 | 108 | 95 | 90 | 502 | 198 | 122 |
| 2004-2012 | SPCOND | Median | 791 | 440 | 484 | 176 | 307 | 120 | 109 | 647 | 336 | 187 |
| 2013 | SPCOND | Median | | 253 | | 134 | 167 | 101 | 102 | 684 | 292 | 166 |
| 2004-2012 | SPCOND | 75th Percentile | 914 | 627 | 497 | 229 | 485 | 149 | 126 | 818 | 523 | 260 |
| 2013 | SPCOND | 75th Percentile | | 281 | | 163 | 180 | 113 | 122 | 871 | 347 | 233 |
| 2004-2012 | SPCOND | Count | 11 | 79 | 14 | 81 | 81 | 74 | 67 | 99 | 82 | 78 |
| 2013 | SPCOND | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 22 | 23 | 24 | 23 | 24 | 25 | 26 | 25 | 24 | 24 |
| 2013 | TEMP | Mean | | 24 | | 23 | 23 | 23 | 24 | 25 | 24 | 24 |
| 2004-2012 | TEMP | Variance | 26 | 18 | 19 | 21 | 23 | 23 | 19 | 19 | 24 | 26 |
| 2013 | TEMP | Variance | | 11 | | 15 | 11 | 12 | 20 | 11 | 10 | 11 |
| 2004-2012 | TEMP | 25th Percentile | 17 | 20 | 21 | 20 | 21 | 22 | 23 | 22 | 21 | 22 |
| 2013 | TEMP | 25th Percentile | | 22 | | 21 | 22 | 22 | 21 | 23 | 21 | 22 |
| 2004-2012 | TEMP | Median | 24 | 24 | 26 | 24 | 24 | 25 | 25 | 26 | 24 | 25 |
| 2013 | TEMP | Median | | 24 | | 22 | 23 | 23 | 23 | 24 | 24 | 23 |
| 2004-2012 | TEMP | 75th Percentile | 26 | 27 | 28 | 27 | 28 | 28 | 29 | 29 | 28 | 28 |
| 2013 | TEMP | 75th Percentile | | 27 | | 26 | 26 | 26 | 28 | 29 | 27 | 28 |
| 2004-2012 | TEMP | Count | 11 | 79 | 14 | 82 | 82 | 76 | 69 | 99 | 83 | 79 |
| 2013 | TEMP | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |
| 2004-2012 | TN | Mean | 2.1 | 1.2 | 1.5 | 1.0 | 1.2 | 1.2 | 1.1 | 1.7 | 1.2 | 1.3 |
| 2013 | TN | Mean | | 1.0 | | 0.8 | 1.2 | 1.0 | 1.2 | 1.4 | 0.9 | 1.3 |
| 2004-2012 | TN | Variance | 0.2 | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.5 | 0.1 | 0.1 |
| 2013 | TN | Variance | | 0.1 | | 0.0 | 0.1 | 0.0 | 0.1 | 0.2 | 0.0 | 0.1 |
| 2004-2012 | TN | 25th Percentile | 1.9 | 1.0 | 1.3 | 0.8 | 1.0 | 1.0 | 0.9 | 1.3 | 0.9 | 1.0 |
| 2013 | TN | 25th Percentile | | 0.8 | | 0.8 | 1.0 | 0.9 | 1.1 | 1.1 | 0.8 | 1.0 |
| 2004-2012 | TN | Median | 2.0 | 1.1 | 1.4 | 1.0 | 1.2 | 1.2 | 1.1 | 1.5 | 1.1 | 1.3 |
| 2013 | TN | Median | | 1.0 | | 0.8 | 1.2 | 1.0 | 1.1 | 1.2 | 0.9 | 1.2 |
| 2004-2012 | TN | 75th Percentile | 2.2 | 1.4 | 1.6 | 1.1 | 1.4 | 1.4 | 1.2 | 2.0 | 1.5 | 1.6 |
| 2013 | TN | 75th Percentile | | 1.1 | | 0.9 | 1.4 | 1.1 | 1.3 | 1.7 | 1.0 | 1.5 |
| 2004-2012 | TN | Count | 4 | 58 | 8 | 57 | 63 | 48 | 34 | 92 | 64 | 60 |
| 2013 | TN | Count | 0 | 8 | 0 | 5 | 11 | 9 | 5 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA121 | LOXA122 | LOXA123 | LOXA124 | LOXA126 | LOXA127 | LOXA128 | LOXA129 | LOXA130 | LOXA131 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 83 | 13 | 15 | 16 | 10 | 7 | 7 | 60 | 16 | 7 |
| 2013 | TP | Mean | | 11 | | 32 | 8 | 6 | 6 | 32 | 10 | 7 |
| 2004-2012 | TP | Variance | 2316 | 57 | 61 | 402 | 32 | 19 | 30 | 3973 | 533 | 12 |
| 2013 | TP | Variance | | 11 | | 2939 | 18 | 3 | 3 | 108 | 30 | 7 |
| 2004-2012 | TP | 25th Percentile | 50 | 9 | 9 | 8 | 6 | 4 | 4 | 29 | 9 | 5 |
| 2013 | TP | 25th Percentile | | 8 | | 10 | 4 | 5 | 5 | 25 | 6 | 4 |
| 2004-2012 | TP | Median | 68 | 12 | 13 | 13 | 9 | 7 | 5 | 43 | 12 | 7 |
| 2013 | TP | Median | | 11 | | 12 | 10 | 7 | 6 | 31 | 8 | 6 |
| 2004-2012 | TP | 75th Percentile | 111 | 15 | 16 | 17 | 12 | 9 | 8 | 74 | 16 | 9 |
| 2013 | TP | 75th Percentile | | 13 | | 24 | 12 | 7 | 7 | 36 | 11 | 8 |
| 2004-2012 | TP | Count | 10 | 79 | 14 | 87 | 81 | 76 | 68 | 98 | 87 | 78 |
| 2013 | TP | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |
| 2004-2012 | TSS | Mean | 14.8 | 3.3 | 5.1 | 3.7 | 3.3 | 3.4 | 4.0 | 7.1 | 3.2 | 3.3 |
| 2013 | TSS | Mean | 0.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.4 | 5.0 | 5.0 |
| 2004-2012 | TSS | Variance | 316.2 | 5.0 | 44.1 | 8.1 | 2.4 | 2.2 | 14.4 | 22.3 | 2.3 | 3.7 |
| 2013 | TSS | Variance | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.7 | 0.0 | 0.0 |
| 2004-2012 | TSS | 25th Percentile | 3.0 | 1.6 | 3.0 | 2.0 | 2.0 | 2.0 | 1.9 | 4.6 | 1.6 | 1.6 |
| 2013 | TSS | 25th Percentile | 0.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Median | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 5.0 | 3.0 | 3.0 |
| 2013 | TSS | Median | 0.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | 75th Percentile | 22.0 | 5.0 | 3.0 | 5.0 | 5.0 | 5.0 | 5.0 | 8.4 | 5.0 | 5.0 |
| 2013 | TSS | 75th Percentile | 0.0 | 5.0 | 0.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Count | 5 | 70 | 10 | 79 | 77 | 68 | 60 | 98 | 80 | 76 |
| 2013 | TSS | Count | 0 | 11 | 0 | 10 | 11 | 11 | 10 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 160 | 112 | 87 | 161 | 123 | 82 | 57 | 20 | 71 | 73 |
| 2013 | ALK | Mean | 161 | 115 | 101 | 177 | 134 | 102 | 56 | 19 | 89 | 52 |
| 2004-2012 | ALK | Variance | 1765 | 1582 | 1543 | 1774 | 2570 | 1775 | 1251 | 152 | 1243 | 1171 |
| 2013 | ALK | Variance | 1724 | 1480 | 1461 | 1969 | 3833 | 2594 | 880 | 15 | 1686 | 526 |
| 2004-2012 | ALK | 25th Percentile | 130 | 81 | 59 | 130 | 86 | 51 | 33 | 13 | 45 | 45 |
| 2013 | ALK | 25th Percentile | 140 | 101 | 77 | 145 | 88 | 63 | 32 | 17 | 64 | 35 |
| 2004-2012 | ALK | Median | 151 | 110 | 81 | 150 | 110 | 72 | 41 | 16 | 58 | 69 |
| 2013 | ALK | Median | 149 | 115 | 86 | 176 | 153 | 104 | 52 | 18 | 76 | 54 |
| 2004-2012 | ALK | 75th Percentile | 190 | 126 | 100 | 186 | 160 | 108 | 80 | 23 | 93 | 98 |
| 2013 | ALK | 75th Percentile | 187 | 128 | 135 | 209 | 174 | 145 | 66 | 21 | 101 | 59 |
| 2004-2012 | ALK | Count | 97 | 23 | 51 | 99 | 41 | 57 | 34 | 24 | 31 | 58 |
| 2013 | ALK | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |
| 2004-2012 | CA | Mean | 56 | 36 | 29 | 58 | 41 | 29 | 19 | 9 | 25 | 27 |
| 2013 | CA | Mean | 54 | 40 | 33 | 60 | 46 | 35 | 19 | 6 | 32 | 15 |
| 2004-2012 | CA | Variance | 248 | 268 | 177 | 239 | 297 | 189 | 121 | 22 | 182 | 173 |
| 2013 | CA | Variance | 209 | 348 | 199 | 270 | 549 | 375 | 131 | 0 | 258 | 48 |
| 2004-2012 | CA | 25th Percentile | 45 | 25 | 19 | 48 | 27 | 17 | 12 | 6 | 16 | 15 |
| 2013 | CA | 25th Percentile | 45 | 34 | 24 | 53 | 27 | 21 | 10 | 6 | 22 | 10 |
| 2004-2012 | CA | Median | 53 | 38 | 27 | 55 | 39 | 25 | 15 | 7 | 20 | 28 |
| 2013 | CA | Median | 51 | 40 | 28 | 57 | 56 | 35 | 17 | 6 | 27 | 15 |
| 2004-2012 | CA | 75th Percentile | 63 | 44 | 38 | 66 | 51 | 38 | 22 | 9 | 36 | 36 |
| 2013 | CA | 75th Percentile | 64 | 47 | 43 | 70 | 60 | 52 | 22 | 6 | 36 | 16 |
| 2004-2012 | CA | Count | 95 | 24 | 51 | 100 | 41 | 56 | 34 | 24 | 30 | 58 |
| 2013 | CA | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |
| 2004-2012 | CL | Mean | 103 | 58 | 50 | 108 | 65 | 48 | 31 | 19 | 40 | 40 |
| 2013 | CL | Mean | 122 | 58 | 50 | 130 | 61 | 53 | 38 | 26 | 41 | 28 |
| 2004-2012 | CL | Variance | 1840 | 966 | 848 | 1786 | 1188 | 806 | 304 | 59 | 451 | 579 |
| 2013 | CL | Variance | 3802 | 764 | 822 | 3557 | 1842 | 1257 | 463 | 240 | 547 | 368 |
| 2004-2012 | CL | 25th Percentile | 70 | 30 | 26 | 80 | 35 | 23 | 19 | 14 | 23 | 21 |
| 2013 | CL | 25th Percentile | 81 | 40 | 36 | 92 | 31 | 32 | 16 | 12 | 26 | 15 |
| 2004-2012 | CL | Median | 99 | 52 | 38 | 110 | 60 | 40 | 24 | 19 | 35 | 35 |
| 2013 | CL | Median | 123 | 43 | 42 | 136 | 45 | 43 | 43 | 22 | 36 | 26 |
| 2004-2012 | CL | 75th Percentile | 121 | 91 | 74 | 130 | 90 | 73 | 44 | 24 | 53 | 57 |
| 2013 | CL | 75th Percentile | 143 | 82 | 61 | 157 | 95 | 79 | 47 | 41 | 53 | 26 |
| 2004-2012 | CL | Count | 99 | 54 | 81 | 100 | 68 | 82 | 74 | 61 | 68 | 61 |
| 2013 | CL | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | 1.30 | 0.36 | 0.41 | 1.30 | 0.48 | 0.37 | 0.31 | 0.28 | 0.31 | 0.83 |
| 2013 | DCS | Mean | 1.06 | 0.50 | 0.43 | 1.08 | 0.58 | 0.38 | 0.36 | 0.29 | 0.30 | 1.03 |
| 2004-2012 | DCS | Variance | | 0.02 | 0.02 | | 0.02 | 0.02 | 0.01 | 0.01 | 0.01 | 0.13 |
| 2013 | DCS | Variance | 0.28 | 0.03 | 0.02 | 0.26 | 0.03 | 0.01 | 0.02 | 0.01 | 0.02 | 0.26 |
| 2004-2012 | DCS | 25th Percentile | 1.30 | 0.25 | 0.32 | 1.30 | 0.36 | 0.27 | 0.24 | 0.21 | 0.22 | 0.53 |
| 2013 | DCS | 25th Percentile | 1.30 | 0.38 | 0.37 | 1.30 | 0.48 | 0.30 | 0.25 | 0.21 | 0.23 | 1.10 |
| 2004-2012 | DCS | Median | 1.30 | 0.33 | 0.36 | 1.30 | 0.46 | 0.35 | 0.28 | 0.26 | 0.26 | 0.73 |
| 2013 | DCS | Median | 1.30 | 0.47 | 0.39 | 1.30 | 0.55 | 0.35 | 0.33 | 0.27 | 0.26 | 1.30 |
| 2004-2012 | DCS | 75th Percentile | 1.30 | 0.45 | 0.48 | 1.30 | 0.59 | 0.41 | 0.38 | 0.32 | 0.39 | 1.29 |
| 2013 | DCS | 75th Percentile | 1.30 | 0.54 | 0.45 | 1.30 | 0.66 | 0.43 | 0.43 | 0.32 | 0.30 | 1.30 |
| 2004-2012 | DCS | Count | 74 | 43 | 59 | 74 | 56 | 68 | 57 | 48 | 53 | 60 |
| 2013 | DCS | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |
| 2004-2012 | SIO2 | Mean | 10 | 12 | 9 | 10 | 12 | 10 | 10 | 7 | 11 | 9 |
| 2013 | SIO2 | Mean | 8 | 6 | 8 | 8 | 9 | 7 | 5 | 2 | 8 | 7 |
| 2004-2012 | SIO2 | Variance | 27 | 23 | 26 | 23 | 34 | 41 | 47 | 20 | 49 | 22 |
| 2013 | SIO2 | Variance | 15 | 25 | 15 | 25 | 43 | 34 | 13 | 3 | 16 | 14 |
| 2004-2012 | SIO2 | 25th Percentile | 6 | 8 | 6 | 6 | 8 | 4 | 5 | 3 | 5 | 6 |
| 2013 | SIO2 | 25th Percentile | 5 | 4 | 6 | 5 | 5 | 3 | 2 | 1 | 8 | 4 |
| 2004-2012 | SIO2 | Median | 9 | 11 | 8 | 9 | 11 | 9 | 9 | 5 | 12 | 7 |
| 2013 | SIO2 | Median | 7 | 8 | 7 | 7 | 9 | 6 | 4 | 2 | 10 | 6 |
| 2004-2012 | SIO2 | 75th Percentile | 12 | 16 | 13 | 12 | 16 | 14 | 14 | 11 | 16 | 13 |
| 2013 | SIO2 | 75th Percentile | 10 | 9 | 10 | 12 | 14 | 9 | 7 | 2 | 10 | 8 |
| 2004-2012 | SIO2 | Count | 98 | 23 | 51 | 100 | 41 | 57 | 34 | 24 | 31 | 58 |
| 2013 | SIO2 | Count | 11 | 3 | 8 | 12 | 6 | 9 | 9 | 4 | 4 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 29.2 | 7.4 | 7.3 | 31.3 | 9.9 | 6.3 | 2.6 | 0.4 | 3.2 | 6.7 |
| 2013 | SO4 | Mean | 29.9 | 6.6 | 5.6 | 36.9 | 11.4 | 7.5 | 2.8 | 0.5 | 5.0 | 2.3 |
| 2004-2012 | SO4 | Variance | 385.5 | 107.8 | 116.0 | 398.7 | 209.1 | 102.6 | 33.8 | 0.5 | 32.1 | 78.9 |
| 2013 | SO4 | Variance | 363.7 | 141.9 | 113.9 | 486.9 | 310.1 | 134.9 | 50.3 | 0.0 | 140.4 | 13.4 |
| 2004-2012 | SO4 | 25th Percentile | 15.0 | 1.2 | 1.1 | 18.0 | 1.3 | 0.9 | 0.5 | 0.1 | 0.7 | 1.2 |
| 2013 | SO4 | 25th Percentile | 19.2 | 1.0 | 0.9 | 23.4 | 1.1 | 0.8 | 0.6 | 0.5 | 0.9 | 0.7 |
| 2004-2012 | SO4 | Median | 25.0 | 2.2 | 2.5 | 26.4 | 3.1 | 1.7 | 0.8 | 0.3 | 1.1 | 2.6 |
| 2013 | SO4 | Median | 20.7 | 2.1 | 1.3 | 32.2 | 1.2 | 1.0 | 0.7 | 0.5 | 1.0 | 0.9 |
| 2004-2012 | SO4 | 75th Percentile | 39.0 | 8.7 | 7.8 | 40.9 | 11.7 | 6.3 | 1.6 | 0.6 | 2.2 | 8.1 |
| 2013 | SO4 | 75th Percentile | 44.8 | 4.5 | 4.0 | 46.0 | 13.7 | 10.8 | 0.9 | 0.5 | 1.6 | 1.0 |
| 2004-2012 | SO4 | Count | 99 | 54 | 81 | 100 | 67 | 82 | 74 | 60 | 68 | 61 |
| 2013 | SO4 | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |
| 2004-2012 | TDEPTH | Mean | 1.11 | 0.21 | 0.28 | 1.12 | 0.27 | 0.27 | 0.21 | 0.19 | 0.21 | 0.48 |
| 2013 | TDEPTH | Mean | NA | 0.22 | 0.27 | NA | 0.28 | 0.27 | 0.25 | 0.20 | 0.22 | 0.64 |
| 2004-2012 | TDEPTH | Variance | 0.18 | 0.01 | 0.01 | 0.15 | 0.02 | 0.01 | 0.01 | 0.01 | 0.01 | 0.07 |
| 2013 | TDEPTH | Variance | NA | 0.02 | 0.02 | NA | 0.03 | 0.02 | 0.01 | 0.01 | 0.02 | 0.00 |
| 2004-2012 | TDEPTH | 25th Percentile | 1.30 | 0.13 | 0.18 | 1.30 | 0.16 | 0.18 | 0.13 | 0.13 | 0.14 | 0.31 |
| 2013 | TDEPTH | 25th Percentile | NA | 0.14 | 0.19 | NA | 0.17 | 0.20 | 0.19 | 0.14 | 0.15 | 0.63 |
| 2004-2012 | TDEPTH | Median | 1.30 | 0.18 | 0.26 | 1.30 | 0.22 | 0.25 | 0.18 | 0.17 | 0.18 | 0.39 |
| 2013 | TDEPTH | Median | NA | 0.16 | 0.24 | NA | 0.21 | 0.22 | 0.22 | 0.19 | 0.17 | 0.64 |
| 2004-2012 | TDEPTH | 75th Percentile | 1.30 | 0.27 | 0.32 | 1.30 | 0.34 | 0.33 | 0.27 | 0.23 | 0.27 | 0.62 |
| 2013 | TDEPTH | 75th Percentile | NA | 0.21 | 0.28 | NA | 0.35 | 0.30 | 0.25 | 0.20 | 0.22 | 0.65 |
| 2004-2012 | TDEPTH | Count | 11 | 50 | 70 | 10 | 63 | 74 | 70 | 61 | 63 | 50 |
| 2013 | TDEPTH | Count | 0 | 7 | 10 | 0 | 10 | 11 | 11 | 10 | 10 | 2 |
| 2004-2012 | TDOC | Mean | 160 | 112 | 87 | 161 | 123 | 82 | 57 | 20 | 71 | 73 |
| 2013 | TDOC | Mean | 161 | 115 | 101 | 177 | 134 | 102 | 56 | 19 | 89 | 52 |
| 2004-2012 | TDOC | Variance | 1765 | 1582 | 1543 | 1774 | 2570 | 1775 | 1251 | 152 | 1243 | 1171 |
| 2013 | TDOC | Variance | 1724 | 1480 | 1461 | 1969 | 3833 | 2594 | 880 | 15 | 1686 | 526 |
| 2004-2012 | TDOC | 25th Percentile | 130 | 81 | 59 | 130 | 86 | 51 | 33 | 13 | 45 | 45 |
| 2013 | TDOC | 25th Percentile | 140 | 101 | 77 | 145 | 88 | 63 | 32 | 17 | 64 | 35 |
| 2004-2012 | TDOC | Median | 151 | 110 | 81 | 150 | 110 | 72 | 41 | 16 | 58 | 69 |
| 2013 | TDOC | Median | 149 | 115 | 86 | 176 | 153 | 104 | 52 | 18 | 76 | 54 |
| 2004-2012 | TDOC | 75th Percentile | 190 | 126 | 100 | 186 | 160 | 108 | 80 | 23 | 93 | 98 |
| 2013 | TDOC | 75th Percentile | 187 | 128 | 135 | 209 | 174 | 145 | 66 | 21 | 101 | 59 |
| 2004-2012 | TDOC | Count | 97 | 23 | 51 | 99 | 41 | 57 | 34 | 24 | 31 | 58 |
| 2013 | TDOC | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 432 | 292 | 248 | 446 | 332 | 238 | 179 | 116 | 223 | 196 |
| 2013 | TDS | Mean | 451 | 276 | 257 | 493 | 331 | 277 | 170 | 81 | 256 | 137 |
| 2004-2012 | TDS | Variance | 18037 | 14712 | 11903 | 15984 | 18728 | 12456 | 8218 | 1525 | 8481 | 9536 |
| 2013 | TDS | Variance | 27390 | 14112 | 10216 | 29111 | 27969 | 16653 | 5745 | 247 | 8193 | 4606 |
| 2004-2012 | TDS | 25th Percentile | 330 | 186 | 158 | 350 | 210 | 154 | 120 | 90 | 150 | 119 |
| 2013 | TDS | 25th Percentile | 316 | 234 | 182 | 374 | 203 | 168 | 110 | 76 | 207 | 89 |
| 2004-2012 | TDS | Median | 420 | 290 | 231 | 433 | 300 | 220 | 151 | 112 | 212 | 160 |
| 2013 | TDS | Median | 436 | 276 | 208 | 488 | 360 | 274 | 159 | 88 | 243 | 120 |
| 2004-2012 | TDS | 75th Percentile | 510 | 376 | 326 | 513 | 434 | 313 | 225 | 136 | 277 | 254 |
| 2013 | TDS | 75th Percentile | 533 | 318 | 356 | 590 | 460 | 382 | 197 | 90 | 292 | 147 |
| 2004-2012 | TDS | Count | 98 | 23 | 51 | 100 | 41 | 56 | 34 | 24 | 31 | 58 |
| 2013 | TDS | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |
| 2004-2012 | TOC | Mean | 26 | 25 | 25 | 26 | 29 | 26 | 24 | 25 | 29 | 21 |
| 2013 | TOC | Mean | 25 | 22 | 23 | 26 | 24 | 23 | 20 | 17 | 24 | 18 |
| 2004-2012 | TOC | Variance | 44 | 57 | 46 | 51 | 67 | 35 | 50 | 54 | 56 | 19 |
| 2013 | TOC | Variance | 72 | 72 | 39 | 79 | 57 | 32 | 32 | 9 | 28 | 36 |
| 2004-2012 | TOC | 25th Percentile | 21 | 19 | 19 | 21 | 22 | 21 | 20 | 21 | 23 | 17 |
| 2013 | TOC | 25th Percentile | 20 | 19 | 18 | 21 | 17 | 17 | 17 | 15 | 22 | 13 |
| 2004-2012 | TOC | Median | 26 | 26 | 24 | 26 | 29 | 25 | 22 | 23 | 28 | 20 |
| 2013 | TOC | Median | 23 | 22 | 24 | 26 | 24 | 23 | 18 | 18 | 24 | 18 |
| 2004-2012 | TOC | 75th Percentile | 30 | 30 | 29 | 30 | 34 | 30 | 26 | 26 | 33 | 25 |
| 2013 | TOC | 75th Percentile | 32 | 25 | 27 | 30 | 30 | 28 | 22 | 18 | 26 | 21 |
| 2004-2012 | TOC | Count | 97 | 23 | 51 | 100 | 41 | 57 | 34 | 24 | 31 | 57 |
| 2013 | TOC | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |
| 2004-2012 | DO | Mean | 4.0 | 2.3 | 3.6 | 4.3 | 1.8 | 2.9 | 4.8 | 4.6 | 4.5 | 2.5 |
| 2013 | DO | Mean | 2.8 | 1.8 | 2.7 | 3.8 | 2.9 | 4.7 | 6.2 | 5.3 | 4.6 | 1.5 |
| 2004-2012 | DO | Variance | 4.1 | 1.5 | 4.1 | 4.4 | 1.7 | 3.4 | 5.9 | 5.9 | 4.4 | 2.7 |
| 2013 | DO | Variance | 1.7 | 0.5 | 1.9 | 3.3 | 6.4 | 7.3 | 14.5 | 6.2 | 9.0 | 1.0 |
| 2004-2012 | DO | 25th Percentile | 2.7 | 1.2 | 1.9 | 2.9 | 0.8 | 1.5 | 3.2 | 2.9 | 3.1 | 1.1 |
| 2013 | DO | 25th Percentile | 2.0 | 1.5 | 1.8 | 2.3 | 1.0 | 2.8 | 4.0 | 3.2 | 3.0 | 0.8 |
| 2004-2012 | DO | Median | 4.0 | 2.2 | 3.6 | 4.5 | 1.4 | 2.5 | 4.2 | 4.1 | 4.4 | 2.6 |
| 2013 | DO | Median | 2.4 | 1.8 | 2.2 | 3.7 | 2.1 | 4.4 | 5.2 | 5.4 | 3.7 | 1.4 |
| 2004-2012 | DO | 75th Percentile | 5.4 | 3.1 | 4.7 | 5.7 | 2.4 | 3.7 | 6.0 | 5.6 | 5.8 | 3.7 |
| 2013 | DO | 75th Percentile | 3.7 | 2.1 | 3.0 | 4.9 | 4.1 | 6.6 | 6.7 | 6.8 | 5.6 | 1.7 |
| 2004-2012 | DO | Count | 95 | 51 | 76 | 97 | 66 | 79 | 71 | 60 | 65 | 60 |
| 2013 | DO | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 24 | 24 | 11 | 22 | 12 | 6 | 5 | 5 | 6 | 5 |
| 2013 | OPO4 | Mean | 12 | 6 | 3 | 13 | 4 | 3 | 3 | 3 | 3 | 3 |
| 2004-2012 | OPO4 | Variance | 3699 | 2844 | 781 | 3910 | 1005 | 56 | 43 | 29 | 47 | 60 |
| 2013 | OPO4 | Variance | 95 | 15 | 2 | 105 | 3 | 2 | 1 | 0 | 1 | 7 |
| 2004-2012 | OPO4 | 25th Percentile | 4 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2013 | OPO4 | 25th Percentile | 7 | 5 | 2 | 6 | 4 | 2 | 2 | 2 | 3 | 2 |
| 2004-2012 | OPO4 | Median | 7 | 4 | 4 | 6 | 3 | 3 | 4 | 3 | 4 | 3 |
| 2013 | OPO4 | Median | 10 | 6 | 3 | 11 | 4 | 3 | 2 | 3 | 3 | 2 |
| 2004-2012 | OPO4 | 75th Percentile | 23 | 15 | 7 | 13 | 5 | 4 | 4 | 4 | 7 | 4 |
| 2013 | OPO4 | 75th Percentile | 12 | 8 | 3 | 17 | 5 | 4 | 3 | 3 | 3 | 3 |
| 2004-2012 | OPO4 | Count | 92 | 23 | 50 | 92 | 40 | 53 | 32 | 23 | 30 | 58 |
| 2013 | OPO4 | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |
| 2004-2012 | PH | Mean | 7.4 | 6.8 | 7.0 | 7.5 | 6.9 | 6.8 | 6.9 | 6.7 | 6.9 | 6.8 |
| 2013 | PH | Mean | 7.3 | 6.6 | 6.7 | 7.4 | 6.8 | 6.8 | 7.1 | 6.9 | 6.8 | 6.5 |
| 2004-2012 | PH | Variance | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.1 | 0.2 | 0.3 | 0.1 | 0.2 |
| 2013 | PH | Variance | 0.0 | 0.1 | 0.1 | 0.0 | 0.2 | 0.2 | 0.6 | 0.4 | 0.2 | 0.1 |
| 2004-2012 | PH | 25th Percentile | 7.2 | 6.6 | 6.8 | 7.3 | 6.7 | 6.6 | 6.6 | 6.4 | 6.7 | 6.5 |
| 2013 | PH | 25th Percentile | 7.2 | 6.4 | 6.6 | 7.2 | 6.5 | 6.5 | 6.7 | 6.6 | 6.5 | 6.3 |
| 2004-2012 | PH | Median | 7.4 | 6.8 | 6.9 | 7.5 | 6.9 | 6.8 | 6.9 | 6.6 | 6.8 | 6.8 |
| 2013 | PH | Median | 7.2 | 6.5 | 6.6 | 7.3 | 6.7 | 6.8 | 7.0 | 6.7 | 6.8 | 6.5 |
| 2004-2012 | PH | 75th Percentile | 7.6 | 7.0 | 7.1 | 7.6 | 7.1 | 6.9 | 7.1 | 7.1 | 7.1 | 7.1 |
| 2013 | PH | 75th Percentile | 7.2 | 6.8 | 6.8 | 7.5 | 7.1 | 7.0 | 7.1 | 7.1 | 7.1 | 6.7 |
| 2004-2012 | PH | Count | 97 | 54 | 79 | 99 | 68 | 82 | 74 | 62 | 68 | 60 |
| 2013 | PH | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |
| 2004-2012 | SPCOND | Mean | 700 | 409 | 343 | 722 | 444 | 318 | 205 | 113 | 255 | 292 |
| 2013 | SPCOND | Mean | 744 | 408 | 345 | 814 | 435 | 358 | 396 | 146 | 234 | 186 |
| 2004-2012 | SPCOND | Variance | 45773 | 31108 | 28134 | 42287 | 41472 | 29152 | 13586 | 1536 | 15141 | 23953 |
| 2013 | SPCOND | Variance | 75424 | 25077 | 28157 | 76931 | 67796 | 44693 | 540635 | 3956 | 24642 | 13038 |
| 2004-2012 | SPCOND | 25th Percentile | 548 | 260 | 201 | 555 | 273 | 172 | 129 | 86 | 160 | 170 |
| 2013 | SPCOND | 25th Percentile | 530 | 291 | 241 | 631 | 245 | 225 | 111 | 88 | 159 | 119 |
| 2004-2012 | SPCOND | Median | 669 | 410 | 338 | 728 | 409 | 276 | 172 | 109 | 220 | 255 |
| 2013 | SPCOND | Median | 734 | 313 | 297 | 841 | 318 | 292 | 229 | 141 | 203 | 142 |
| 2004-2012 | SPCOND | 75th Percentile | 819 | 544 | 465 | 841 | 600 | 429 | 242 | 136 | 319 | 391 |
| 2013 | SPCOND | 75th Percentile | 863 | 590 | 431 | 949 | 665 | 568 | 273 | 202 | 254 | 196 |
| 2004-2012 | SPCOND | Count | 99 | 55 | 79 | 99 | 68 | 81 | 73 | 61 | 67 | 60 |
| 2013 | SPCOND | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 25 | 23 | 24 | 25 | 23 | 24 | 24 | 24 | 24 | 23 |
| 2013 | TEMP | Mean | 25 | 24 | 25 | 26 | 26 | 26 | 26 | 27 | 25 | 24 |
| 2004-2012 | TEMP | Variance | 18 | 20 | 24 | 18 | 21 | 24 | 26 | 25 | 24 | 16 |
| 2013 | TEMP | Variance | 12 | 11 | 13 | 13 | 9 | 10 | 13 | 13 | 9 | 12 |
| 2004-2012 | TEMP | 25th Percentile | 23 | 20 | 22 | 22 | 20 | 20 | 21 | 21 | 21 | 21 |
| 2013 | TEMP | 25th Percentile | 23 | 21 | 22 | 23 | 23 | 24 | 23 | 24 | 23 | 22 |
| 2004-2012 | TEMP | Median | 26 | 23 | 25 | 26 | 23 | 25 | 25 | 26 | 25 | 23 |
| 2013 | TEMP | Median | 24 | 24 | 24 | 25 | 26 | 26 | 28 | 28 | 26 | 23 |
| 2004-2012 | TEMP | 75th Percentile | 29 | 27 | 28 | 29 | 27 | 28 | 28 | 28 | 28 | 27 |
| 2013 | TEMP | 75th Percentile | 29 | 28 | 28 | 28 | 29 | 29 | 29 | 30 | 28 | 27 |
| 2004-2012 | TEMP | Count | 99 | 55 | 81 | 99 | 67 | 81 | 73 | 62 | 67 | 60 |
| 2013 | TEMP | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |
| 2004-2012 | TN | Mean | 1.8 | 1.6 | 1.4 | 1.8 | 1.6 | 1.4 | 1.3 | 1.4 | 1.4 | 1.2 |
| 2013 | TN | Mean | 1.4 | 1.0 | 1.2 | 1.5 | 1.4 | 1.3 | 1.3 | 1.2 | 1.3 | 1.1 |
| 2004-2012 | TN | Variance | 0.5 | 0.5 | 0.2 | 0.4 | 0.3 | 0.1 | 0.2 | 0.2 | 0.2 | 0.1 |
| 2013 | TN | Variance | 0.2 | 0.0 | 0.0 | 0.3 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.0 |
| 2004-2012 | TN | 25th Percentile | 1.3 | 1.2 | 1.0 | 1.3 | 1.2 | 1.1 | 1.0 | 1.1 | 1.0 | 0.9 |
| 2013 | TN | 25th Percentile | 1.2 | 1.0 | 1.0 | 1.2 | 1.2 | 1.1 | 1.2 | 1.1 | 1.2 | 0.9 |
| 2004-2012 | TN | Median | 1.6 | 1.5 | 1.3 | 1.7 | 1.5 | 1.3 | 1.3 | 1.3 | 1.2 | 1.1 |
| 2013 | TN | Median | 1.2 | 1.0 | 1.1 | 1.4 | 1.3 | 1.2 | 1.3 | 1.3 | 1.3 | 1.1 |
| 2004-2012 | TN | 75th Percentile | 2.1 | 1.8 | 1.6 | 2.1 | 1.8 | 1.6 | 1.5 | 1.5 | 1.5 | 1.3 |
| 2013 | TN | 75th Percentile | 1.6 | 1.0 | 1.3 | 1.8 | 1.4 | 1.4 | 1.4 | 1.3 | 1.4 | 1.2 |
| 2004-2012 | TN | Count | 92 | 22 | 49 | 95 | 39 | 54 | 32 | 23 | 29 | 58 |
| 2013 | TN | Count | 11 | 2 | 8 | 12 | 5 | 8 | 8 | 3 | 4 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOXA132 | LOXA133 | LOXA134 | LOXA135 | LOXA136 | LOXA137 | LOXA138 | LOXA139 | LOXA140 | LOXA141 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 60 | 47 | 17 | 59 | 30 | 14 | 9 | 8 | 12 | 12 |
| 2013 | TP | Mean | 31 | 19 | 9 | 35 | 17 | 9 | 7 | 6 | 10 | 11 |
| 2004-2012 | TP | Variance | 4631 | 3690 | 607 | 5147 | 1213 | 89 | 36 | 13 | 70 | 76 |
| 2013 | TP | Variance | 113 | 63 | 21 | 172 | 42 | 9 | 16 | 9 | 41 | 4 |
| 2004-2012 | TP | 25th Percentile | 30 | 17 | 9 | 27 | 15 | 9 | 6 | 5 | 9 | 8 |
| 2013 | TP | 25th Percentile | 24 | 14 | 6 | 25 | 13 | 8 | 4 | 4 | 6 | 10 |
| 2004-2012 | TP | Median | 43 | 27 | 12 | 43 | 20 | 12 | 8 | 7 | 10 | 11 |
| 2013 | TP | Median | 26 | 19 | 8 | 33 | 14 | 9 | 7 | 6 | 9 | 11 |
| 2004-2012 | TP | 75th Percentile | 70 | 41 | 18 | 67 | 28 | 16 | 10 | 9 | 13 | 14 |
| 2013 | TP | 75th Percentile | 37 | 26 | 10 | 39 | 19 | 11 | 8 | 8 | 11 | 12 |
| 2004-2012 | TP | Count | 97 | 54 | 80 | 100 | 68 | 88 | 74 | 61 | 70 | 61 |
| 2013 | TP | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |
| 2004-2012 | TSS | Mean | 7.5 | 4.9 | 3.7 | 6.4 | 4.1 | 3.3 | 3.6 | 3.7 | 3.5 | 4.3 |
| 2013 | TSS | Mean | 5.1 | 5.0 | 5.0 | 5.1 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.9 |
| 2004-2012 | TSS | Variance | 55.3 | 7.4 | 3.8 | 16.9 | 7.9 | 2.2 | 4.3 | 2.3 | 2.5 | 68.0 |
| 2013 | TSS | Variance | 0.1 | 0.0 | 0.0 | 0.2 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 4.7 |
| 2004-2012 | TSS | 25th Percentile | 4.0 | 3.0 | 2.0 | 4.0 | 2.0 | 1.9 | 2.0 | 2.5 | 2.0 | 2.0 |
| 2013 | TSS | 25th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Median | 5.0 | 5.0 | 3.0 | 5.0 | 4.3 | 3.0 | 3.0 | 3.5 | 3.0 | 2.9 |
| 2013 | TSS | Median | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | 75th Percentile | 6.9 | 5.0 | 5.0 | 8.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2013 | TSS | 75th Percentile | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 | 5.0 |
| 2004-2012 | TSS | Count | 98 | 48 | 69 | 99 | 58 | 76 | 64 | 51 | 58 | 60 |
| 2013 | TSS | Count | 11 | 8 | 11 | 12 | 11 | 12 | 12 | 11 | 10 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 40 | 12 | 43 | 16 | 43 | 83 | 42 | 13 | 80 | 8 |
| 2013 | ALK | Mean | 31 | 13 | 32 | 16 | 48 | 56 | 30 | 14 | 72 | 9 |
| 2004-2012 | ALK | Variance | 219 | 17 | 274 | 23 | 369 | 1346 | 472 | 74 | 890 | 4 |
| 2013 | ALK | Variance | 13 | 4 | 81 | 11 | 1433 | 394 | 59 | 5 | 354 | 3 |
| 2004-2012 | ALK | 25th Percentile | 30 | 10 | 30 | 13 | 31 | 50 | 28 | 8 | 58 | 8 |
| 2013 | ALK | 25th Percentile | 29 | 12 | 28 | 14 | 28 | 40 | 27 | 13 | 63 | 9 |
| 2004-2012 | ALK | Median | 35 | 12 | 40 | 15 | 39 | 80 | 36 | 10 | 73 | 8 |
| 2013 | ALK | Median | 31 | 13 | 32 | 16 | 32 | 55 | 30 | 14 | 67 | 10 |
| 2004-2012 | ALK | 75th Percentile | 48 | 14 | 53 | 20 | 49 | 106 | 46 | 13 | 98 | 9 |
| 2013 | ALK | 75th Percentile | 32 | 14 | 36 | 16 | 57 | 72 | 33 | 14 | 78 | 10 |
| 2004-2012 | ALK | Count | 40 | 77 | 102 | 76 | 96 | 97 | 93 | 14 | 58 | 19 |
| 2013 | ALK | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |
| 2004-2012 | CA | Mean | 11 | 7 | 12 | 8 | 15 | 25 | 14 | 6 | 25 | 4 |
| 2013 | CA | Mean | 11 | 6 | 10 | 7 | 17 | 16 | 10 | 6 | 25 | 4 |
| 2004-2012 | CA | Variance | 19 | 4 | 19 | 4 | 50 | 124 | 46 | 7 | 79 | 1 |
| 2013 | CA | Variance | 2 | 1 | 10 | 2 | 207 | 49 | 6 | 2 | 58 | 1 |
| 2004-2012 | CA | 25th Percentile | 8 | 5 | 9 | 7 | 11 | 14 | 9 | 4 | 19 | 3 |
| 2013 | CA | 25th Percentile | 10 | 5 | 8 | 6 | 9 | 11 | 8 | 5 | 20 | 4 |
| 2004-2012 | CA | Median | 10 | 6 | 11 | 8 | 14 | 24 | 12 | 5 | 23 | 4 |
| 2013 | CA | Median | 11 | 6 | 9 | 7 | 11 | 15 | 10 | 6 | 23 | 5 |
| 2004-2012 | CA | 75th Percentile | 15 | 8 | 15 | 9 | 17 | 34 | 15 | 6 | 31 | 5 |
| 2013 | CA | 75th Percentile | 12 | 7 | 10 | 8 | 20 | 22 | 11 | 6 | 27 | 5 |
| 2004-2012 | CA | Count | 40 | 77 | 102 | 76 | 96 | 96 | 92 | 14 | 59 | 18 |
| 2013 | CA | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |
| 2004-2012 | CL | Mean | 23 | 21 | 26 | 21 | 34 | 49 | 31 | 22 | 49 | 20 |
| 2013 | CL | Mean | 20 | 17 | 22 | 18 | 40 | 35 | 22 | 27 | 44 | 21 |
| 2004-2012 | CL | Variance | 186 | 62 | 125 | 41 | 458 | 643 | 397 | 51 | 541 | 45 |
| 2013 | CL | Variance | 64 | 30 | 69 | 29 | 863 | 378 | 48 | 164 | 277 | 24 |
| 2004-2012 | CL | 25th Percentile | 14 | 16 | 18 | 16 | 21 | 27 | 18 | 16 | 29 | 15 |
| 2013 | CL | 25th Percentile | 14 | 13 | 18 | 14 | 20 | 20 | 17 | 17 | 33 | 17 |
| 2004-2012 | CL | Median | 19 | 19 | 24 | 20 | 28 | 44 | 25 | 21 | 44 | 20 |
| 2013 | CL | Median | 21 | 17 | 21 | 17 | 26 | 28 | 25 | 23 | 40 | 21 |
| 2004-2012 | CL | 75th Percentile | 28 | 25 | 32 | 24 | 36 | 71 | 36 | 25 | 69 | 24 |
| 2013 | CL | 75th Percentile | 25 | 21 | 25 | 20 | 54 | 47 | 26 | 37 | 57 | 25 |
| 2004-2012 | CL | Count | 77 | 94 | 102 | 88 | 98 | 98 | 96 | 51 | 84 | 59 |
| 2013 | CL | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | 0.32 | 0.50 | 0.83 | 0.48 | 0.67 | 0.91 | 0.76 | 0.24 | 0.39 | 0.27 |
| 2013 | DCS | Mean | 0.31 | 0.54 | 0.81 | 0.53 | 0.72 | 0.94 | 0.77 | 0.26 | 0.40 | 0.30 |
| 2004-2012 | DCS | Variance | 0.02 | 0.02 | 0.03 | 0.03 | 0.03 | 0.05 | 0.05 | 0.01 | 0.02 | 0.01 |
| 2013 | DCS | Variance | 0.01 | 0.00 | 0.02 | 0.00 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 |
| 2004-2012 | DCS | 25th Percentile | 0.23 | 0.42 | 0.74 | 0.34 | 0.55 | 0.77 | 0.63 | 0.19 | 0.28 | 0.23 |
| 2013 | DCS | 25th Percentile | 0.27 | 0.52 | 0.69 | 0.48 | 0.73 | 0.89 | 0.73 | 0.22 | 0.38 | 0.25 |
| 2004-2012 | DCS | Median | 0.32 | 0.49 | 0.85 | 0.45 | 0.69 | 0.96 | 0.80 | 0.22 | 0.37 | 0.25 |
| 2013 | DCS | Median | 0.30 | 0.57 | 0.83 | 0.51 | 0.74 | 0.94 | 0.79 | 0.23 | 0.40 | 0.31 |
| 2004-2012 | DCS | 75th Percentile | 0.39 | 0.60 | 0.94 | 0.62 | 0.82 | 1.07 | 0.92 | 0.25 | 0.47 | 0.31 |
| 2013 | DCS | 75th Percentile | 0.36 | 0.59 | 0.92 | 0.58 | 0.76 | 0.99 | 0.82 | 0.32 | 0.43 | 0.35 |
| 2004-2012 | DCS | Count | 57 | 67 | 68 | 65 | 67 | 67 | 66 | 48 | 57 | 51 |
| 2013 | DCS | Count | 12 | 11 | 10 | 11 | 11 | 11 | 11 | 11 | 11 | 12 |
| 2004-2012 | SIO2 | Mean | 6 | 3 | 6 | 3 | 4 | 8 | 5 | 4 | 9 | 3 |
| 2013 | SIO2 | Mean | 8 | 5 | 6 | 5 | 6 | 6 | 3 | 3 | 7 | 5 |
| 2004-2012 | SIO2 | Variance | 16 | 2 | 8 | 4 | 10 | 26 | 11 | 6 | 23 | 4 |
| 2013 | SIO2 | Variance | 5 | 3 | 7 | 1 | 58 | 35 | 4 | 10 | 10 | 16 |
| 2004-2012 | SIO2 | 25th Percentile | 3 | 2 | 4 | 2 | 2 | 4 | 2 | 3 | 5 | 1 |
| 2013 | SIO2 | 25th Percentile | 7 | 4 | 4 | 4 | 1 | 1 | 2 | 2 | 4 | 2 |
| 2004-2012 | SIO2 | Median | 6 | 3 | 5 | 3 | 3 | 6 | 4 | 4 | 8 | 3 |
| 2013 | SIO2 | Median | 8 | 5 | 5 | 5 | 2 | 4 | 3 | 3 | 7 | 5 |
| 2004-2012 | SIO2 | 75th Percentile | 9 | 4 | 8 | 4 | 7 | 10 | 6 | 5 | 12 | 5 |
| 2013 | SIO2 | 75th Percentile | 9 | 6 | 7 | 6 | 10 | 9 | 4 | 4 | 9 | 8 |
| 2004-2012 | SIO2 | Count | 40 | 76 | 101 | 76 | 95 | 96 | 92 | 14 | 59 | 19 |
| 2013 | SIO2 | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 1.2 | 0.1 | 0.9 | 0.1 | 3.3 | 11.8 | 2.5 | 0.3 | 3.9 | 0.1 |
| 2013 | SO4 | Mean | 0.7 | 0.1 | 0.8 | 0.1 | 5.5 | 6.0 | 0.8 | 0.1 | 1.9 | 0.1 |
| 2004-2012 | SO4 | Variance | 1.8 | 0.0 | 1.1 | 0.0 | 53.3 | 110.2 | 29.7 | 1.1 | 43.7 | 0.0 |
| 2013 | SO4 | Variance | 0.4 | | 2.8 | 0.0 | 108.0 | 42.2 | 1.7 | | 3.7 | |
| 2004-2012 | SO4 | 25th Percentile | 0.4 | 0.1 | 0.2 | 0.1 | 0.6 | 2.7 | 0.2 | 0.1 | 0.9 | 0.1 |
| 2013 | SO4 | 25th Percentile | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 1.7 | 0.1 | 0.1 | 0.5 | 0.1 |
| 2004-2012 | SO4 | Median | 0.8 | 0.1 | 0.6 | 0.1 | 1.1 | 8.0 | 0.8 | 0.1 | 1.4 | 0.1 |
| 2013 | SO4 | Median | 0.6 | 0.1 | 0.1 | 0.1 | 0.3 | 2.6 | 0.1 | 0.1 | 1.5 | 0.1 |
| 2004-2012 | SO4 | 75th Percentile | 1.7 | 0.1 | 1.2 | 0.1 | 2.5 | 18.1 | 2.0 | 0.1 | 3.4 | 0.1 |
| 2013 | SO4 | 75th Percentile | 0.9 | 0.1 | 0.5 | 0.1 | 5.1 | 8.8 | 0.7 | 0.1 | 2.4 | 0.1 |
| 2004-2012 | SO4 | Count | 78 | 94 | 102 | 88 | 97 | 98 | 95 | 51 | 84 | 59 |
| 2013 | SO4 | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |
| 2004-2012 | TDEPTH | Mean | 0.20 | 0.32 | 0.64 | 0.34 | 0.52 | 0.68 | 0.55 | 0.14 | 0.25 | 0.16 |
| 2013 | TDEPTH | Mean | 0.18 | 0.42 | 0.63 | 0.38 | 0.59 | 0.72 | 0.56 | 0.13 | 0.26 | 0.15 |
| 2004-2012 | TDEPTH | Variance | 0.01 | 0.03 | 0.04 | 0.03 | 0.03 | 0.05 | 0.04 | 0.01 | 0.01 | 0.01 |
| 2013 | TDEPTH | Variance | 0.00 | 0.01 | 0.03 | 0.01 | 0.01 | 0.01 | 0.01 | 0.00 | 0.00 | 0.00 |
| 2004-2012 | TDEPTH | 25th Percentile | 0.12 | 0.19 | 0.52 | 0.24 | 0.41 | 0.54 | 0.42 | 0.08 | 0.18 | 0.11 |
| 2013 | TDEPTH | 25th Percentile | 0.14 | 0.37 | 0.53 | 0.34 | 0.52 | 0.65 | 0.48 | 0.09 | 0.22 | 0.11 |
| 2004-2012 | TDEPTH | Median | 0.18 | 0.28 | 0.65 | 0.34 | 0.52 | 0.67 | 0.55 | 0.13 | 0.24 | 0.17 |
| 2013 | TDEPTH | Median | 0.18 | 0.38 | 0.60 | 0.36 | 0.58 | 0.75 | 0.57 | 0.13 | 0.25 | 0.15 |
| 2004-2012 | TDEPTH | 75th Percentile | 0.26 | 0.45 | 0.79 | 0.45 | 0.63 | 0.81 | 0.66 | 0.18 | 0.29 | 0.20 |
| 2013 | TDEPTH | 75th Percentile | 0.19 | 0.48 | 0.76 | 0.40 | 0.68 | 0.79 | 0.64 | 0.18 | 0.28 | 0.20 |
| 2004-2012 | TDEPTH | Count | 60 | 65 | 68 | 62 | 65 | 68 | 65 | 49 | 58 | 49 |
| 2013 | TDEPTH | Count | 12 | 11 | 11 | 11 | 11 | 11 | 11 | 12 | 12 | 12 |
| 2004-2012 | TDOC | Mean | 40 | 12 | 43 | 16 | 43 | 83 | 42 | 13 | 80 | 8 |
| 2013 | TDOC | Mean | 31 | 13 | 32 | 16 | 48 | 56 | 30 | 14 | 72 | 9 |
| 2004-2012 | TDOC | Variance | 219 | 17 | 274 | 23 | 369 | 1346 | 472 | 74 | 890 | 4 |
| 2013 | TDOC | Variance | 13 | 4 | 81 | 11 | 1433 | 394 | 59 | 5 | 354 | 3 |
| 2004-2012 | TDOC | 25th Percentile | 30 | 10 | 30 | 13 | 31 | 50 | 28 | 8 | 58 | 8 |
| 2013 | TDOC | 25th Percentile | 29 | 12 | 28 | 14 | 28 | 40 | 27 | 13 | 63 | 9 |
| 2004-2012 | TDOC | Median | 35 | 12 | 40 | 15 | 39 | 80 | 36 | 10 | 73 | 8 |
| 2013 | TDOC | Median | 31 | 13 | 32 | 16 | 32 | 55 | 30 | 14 | 67 | 10 |
| 2004-2012 | TDOC | 75th Percentile | 48 | 14 | 53 | 20 | 49 | 106 | 46 | 13 | 98 | 9 |
| 2013 | TDOC | 75th Percentile | 32 | 14 | 36 | 16 | 57 | 72 | 33 | 14 | 78 | 10 |
| 2004-2012 | TDOC | Count | 40 | 77 | 102 | 76 | 96 | 97 | 93 | 14 | 58 | 19 |
| 2013 | TDOC | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 133 | 93 | 128 | 96 | 143 | 231 | 134 | 95 | 233 | 88 |
| 2013 | TDS | Mean | 135 | 72 | 96 | 75 | 154 | 145 | 96 | 103 | 206 | 86 |
| 2004-2012 | TDS | Variance | 3494 | 1347 | 2269 | 912 | 5590 | 10771 | 5509 | 682 | 6399 | 1294 |
| 2013 | TDS | Variance | 242 | 1030 | 1952 | 852 | 14688 | 7364 | 1072 | 1458 | 4795 | 161 |
| 2004-2012 | TDS | 25th Percentile | 84 | 66 | 91 | 78 | 93 | 141 | 88 | 81 | 175 | 61 |
| 2013 | TDS | 25th Percentile | 130 | 57 | 63 | 53 | 81 | 93 | 70 | 90 | 154 | 79 |
| 2004-2012 | TDS | Median | 125 | 89 | 123 | 92 | 131 | 215 | 112 | 95 | 222 | 96 |
| 2013 | TDS | Median | 135 | 68 | 84 | 74 | 102 | 132 | 98 | 103 | 186 | 86 |
| 2004-2012 | TDS | 75th Percentile | 176 | 112 | 162 | 112 | 157 | 311 | 161 | 116 | 291 | 110 |
| 2013 | TDS | 75th Percentile | 141 | 94 | 131 | 95 | 207 | 184 | 117 | 117 | 242 | 93 |
| 2004-2012 | TDS | Count | 37 | 77 | 102 | 76 | 96 | 97 | 93 | 14 | 58 | 19 |
| 2013 | TDS | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |
| 2004-2012 | TOC | Mean | 18 | 19 | 17 | 18 | 17 | 19 | 16 | 21 | 27 | 22 |
| 2013 | TOC | Mean | 18 | 17 | 14 | 15 | 16 | 16 | 14 | 21 | 21 | 18 |
| 2004-2012 | TOC | Variance | 8 | 18 | 12 | 17 | 15 | 15 | 12 | 12 | 45 | 18 |
| 2013 | TOC | Variance | 0 | 20 | 5 | 12 | 13 | 7 | 3 | 20 | 7 | 22 |
| 2004-2012 | TOC | 25th Percentile | 16 | 16 | 14 | 16 | 15 | 16 | 14 | 18 | 24 | 18 |
| 2013 | TOC | 25th Percentile | 18 | 14 | 13 | 14 | 13 | 14 | 14 | 20 | 20 | 16 |
| 2004-2012 | TOC | Median | 18 | 19 | 16 | 18 | 16 | 19 | 16 | 21 | 26 | 22 |
| 2013 | TOC | Median | 18 | 16 | 14 | 15 | 15 | 17 | 14 | 21 | 20 | 17 |
| 2004-2012 | TOC | 75th Percentile | 18 | 21 | 18 | 20 | 19 | 22 | 18 | 24 | 30 | 25 |
| 2013 | TOC | 75th Percentile | 18 | 20 | 16 | 18 | 19 | 18 | 15 | 23 | 22 | 19 |
| 2004-2012 | TOC | Count | 40 | 76 | 102 | 75 | 93 | 94 | 91 | 13 | 58 | 19 |
| 2013 | TOC | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |
| 2004-2012 | DO | Mean | 4.3 | 4.1 | 4.6 | 4.6 | 4.2 | 4.6 | 2.9 | 4.6 | 4.1 | 4.7 |
| 2013 | DO | Mean | 4.8 | 4.5 | 4.7 | 4.1 | 4.7 | 4.5 | 3.5 | 4.1 | 3.0 | 4.7 |
| 2004-2012 | DO | Variance | 3.2 | 4.3 | 3.4 | 4.0 | 3.0 | 3.5 | 2.9 | 3.4 | 3.6 | 2.5 |
| 2013 | DO | Variance | 6.5 | 6.4 | 3.8 | 3.1 | 3.5 | 4.1 | 2.0 | 3.7 | 3.5 | 2.9 |
| 2004-2012 | DO | 25th Percentile | 3.1 | 2.5 | 3.0 | 3.2 | 2.7 | 3.1 | 1.5 | 3.1 | 2.6 | 3.5 |
| 2013 | DO | 25th Percentile | 2.4 | 3.2 | 2.7 | 3.0 | 3.3 | 3.1 | 2.8 | 2.8 | 1.6 | 4.3 |
| 2004-2012 | DO | Median | 3.9 | 3.9 | 4.6 | 4.4 | 4.2 | 4.7 | 2.6 | 3.8 | 3.9 | 4.4 |
| 2013 | DO | Median | 4.5 | 3.7 | 5.2 | 3.7 | 4.9 | 3.8 | 3.4 | 3.2 | 2.4 | 5.1 |
| 2004-2012 | DO | 75th Percentile | 5.3 | 5.5 | 6.2 | 6.1 | 5.4 | 6.0 | 3.8 | 5.9 | 5.2 | 5.9 |
| 2013 | DO | 75th Percentile | 6.7 | 5.6 | 6.2 | 5.7 | 5.7 | 5.6 | 4.5 | 5.6 | 4.0 | 5.7 |
| 2004-2012 | DO | Count | 74 | 94 | 98 | 87 | 95 | 96 | 94 | 53 | 79 | 57 |
| 2013 | DO | Count | 9 | 10 | 11 | 11 | 11 | 11 | 11 | 6 | 11 | 8 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 | 3 |
| 2013 | OPO4 | Mean | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Variance | 1 | 1 | 1 | 1 | 2 | 1 | 1 | 6 | 2 | 6 |
| 2013 | OPO4 | Variance | | | | | | | | | | |
| 2004-2012 | OPO4 | 25th Percentile | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2013 | OPO4 | 25th Percentile | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Median | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2013 | OPO4 | Median | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | 75th Percentile | 4 | 4 | 4 | 4 | 4 | 4 | 4 | 2 | 4 | 4 |
| 2013 | OPO4 | 75th Percentile | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Count | 40 | 76 | 100 | 75 | 95 | 96 | 92 | 15 | 59 | 18 |
| 2013 | OPO4 | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |
| 2004-2012 | PH | Mean | 6.6 | 6.4 | 6.8 | 6.4 | 6.7 | 7.0 | 6.5 | 6.4 | 6.7 | 6.2 |
| 2013 | PH | Mean | 6.5 | 6.2 | 7.0 | 6.3 | 6.6 | 6.8 | 6.5 | 6.8 | 6.7 | 6.5 |
| 2004-2012 | PH | Variance | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.2 | 0.1 | 0.3 | 0.1 | 0.2 |
| 2013 | PH | Variance | 0.1 | 0.2 | 0.1 | 0.1 | 0.1 | 0.1 | 0.0 | 0.3 | 0.0 | 0.2 |
| 2004-2012 | PH | 25th Percentile | 6.5 | 6.1 | 6.6 | 6.2 | 6.5 | 6.8 | 6.3 | 6.1 | 6.5 | 6.1 |
| 2013 | PH | 25th Percentile | 6.3 | 6.1 | 6.8 | 6.2 | 6.3 | 6.6 | 6.4 | 6.3 | 6.6 | 6.2 |
| 2004-2012 | PH | Median | 6.6 | 6.3 | 6.8 | 6.4 | 6.7 | 7.1 | 6.5 | 6.3 | 6.7 | 6.2 |
| 2013 | PH | Median | 6.5 | 6.2 | 7.1 | 6.5 | 6.5 | 6.9 | 6.5 | 6.7 | 6.7 | 6.3 |
| 2004-2012 | PH | 75th Percentile | 6.8 | 6.5 | 7.0 | 6.6 | 6.8 | 7.3 | 6.7 | 6.7 | 6.9 | 6.4 |
| 2013 | PH | 75th Percentile | 6.6 | 6.5 | 7.2 | 6.5 | 6.8 | 7.0 | 6.6 | 7.2 | 6.8 | 6.8 |
| 2004-2012 | PH | Count | 78 | 94 | 100 | 86 | 96 | 97 | 95 | 56 | 83 | 59 |
| 2013 | PH | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |
| 2004-2012 | SPCOND | Mean | 165 | 113 | 183 | 113 | 218 | 362 | 200 | 117 | 331 | 103 |
| 2013 | SPCOND | Mean | 133 | 102 | 151 | 107 | 250 | 251 | 145 | 139 | 302 | 101 |
| 2004-2012 | SPCOND | Variance | 5994 | 1439 | 4724 | 916 | 14464 | 28985 | 13368 | 1055 | 21067 | 600 |
| 2013 | SPCOND | Variance | 1690 | 452 | 2351 | 557 | 34514 | 12606 | 1549 | 2036 | 7153 | 743 |
| 2004-2012 | SPCOND | 25th Percentile | 110 | 85 | 127 | 96 | 142 | 221 | 128 | 93 | 227 | 86 |
| 2013 | SPCOND | 25th Percentile | 103 | 89 | 122 | 98 | 131 | 182 | 118 | 110 | 261 | 82 |
| 2004-2012 | SPCOND | Median | 134 | 104 | 169 | 110 | 184 | 330 | 166 | 113 | 291 | 104 |
| 2013 | SPCOND | Median | 139 | 100 | 147 | 105 | 162 | 217 | 156 | 136 | 286 | 105 |
| 2004-2012 | SPCOND | 75th Percentile | 201 | 134 | 223 | 130 | 224 | 511 | 231 | 136 | 434 | 117 |
| 2013 | SPCOND | 75th Percentile | 152 | 111 | 163 | 115 | 309 | 324 | 162 | 163 | 317 | 118 |
| 2004-2012 | SPCOND | Count | 75 | 85 | 94 | 79 | 90 | 94 | 91 | 56 | 79 | 58 |
| 2013 | SPCOND | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 23 | 23 | 24 | 23 | 24 | 24 | 23 | 23 | 23 | 23 |
| 2013 | TEMP | Mean | 23 | 23 | 23 | 24 | 23 | 23 | 23 | 24 | 23 | 23 |
| 2004-2012 | TEMP | Variance | 27 | 22 | 22 | 22 | 21 | 21 | 20 | 29 | 26 | 30 |
| 2013 | TEMP | Variance | 22 | 14 | 14 | 12 | 13 | 15 | 13 | 27 | 21 | 25 |
| 2004-2012 | TEMP | 25th Percentile | 19 | 20 | 21 | 20 | 20 | 21 | 20 | 20 | 19 | 20 |
| 2013 | TEMP | 25th Percentile | 20 | 20 | 20 | 23 | 21 | 20 | 21 | 23 | 20 | 19 |
| 2004-2012 | TEMP | Median | 24 | 23 | 25 | 23 | 24 | 25 | 24 | 24 | 24 | 24 |
| 2013 | TEMP | Median | 25 | 22 | 24 | 23 | 24 | 22 | 23 | 26 | 23 | 22 |
| 2004-2012 | TEMP | 75th Percentile | 27 | 27 | 28 | 28 | 28 | 28 | 27 | 28 | 28 | 28 |
| 2013 | TEMP | 75th Percentile | 27 | 27 | 27 | 27 | 27 | 27 | 26 | 27 | 27 | 27 |
| 2004-2012 | TEMP | Count | 80 | 99 | 104 | 91 | 99 | 101 | 99 | 59 | 87 | 62 |
| 2013 | TEMP | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |
| 2004-2012 | TN | Mean | 1.1 | 1.2 | 1.1 | 1.2 | 0.9 | 1.3 | 0.9 | 1.4 | 1.3 | 1.6 |
| 2013 | TN | Mean | 1.0 | 1.0 | 0.9 | 1.0 | 0.9 | 1.1 | 0.8 | NA | 1.0 | 1.5 |
| 2004-2012 | TN | Variance | 0.0 | 0.1 | 0.2 | 0.2 | 0.1 | 0.0 | 0.0 | 0.1 | 0.1 | 0.1 |
| 2013 | TN | Variance | NA | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | NA | 0.0 | 0.2 |
| 2004-2012 | TN | 25th Percentile | 0.9 | 1.0 | 0.9 | 1.0 | 0.8 | 1.1 | 0.8 | 1.3 | 1.0 | 1.4 |
| 2013 | TN | 25th Percentile | 1.0 | 0.9 | 0.8 | 0.9 | 0.8 | 1.0 | 0.7 | NA | 1.0 | 1.4 |
| 2004-2012 | TN | Median | 1.1 | 1.1 | 1.0 | 1.1 | 0.9 | 1.3 | 0.9 | 1.5 | 1.3 | 1.5 |
| 2013 | TN | Median | 1.0 | 0.9 | 0.8 | 1.0 | 0.8 | 1.1 | 0.7 | NA | 1.0 | 1.5 |
| 2004-2012 | TN | 75th Percentile | 1.2 | 1.3 | 1.1 | 1.3 | 1.0 | 1.4 | 1.0 | 1.5 | 1.5 | 1.7 |
| 2013 | TN | 75th Percentile | 1.0 | 1.1 | 0.9 | 1.0 | 1.0 | 1.1 | 0.8 | NA | 1.1 | 1.7 |
| 2004-2012 | TN | Count | 34 | 73 | 94 | 69 | 89 | 87 | 84 | 11 | 51 | 15 |
| 2013 | TN | Count | 1 | 10 | 11 | 11 | 11 | 11 | 11 | 0 | 9 | 2 |

| PERIOD | PARAMETER | STATISTIC | LOX10 | LOX11 | LOX12 | LOX13 | LOX14 | LOX15 | LOX16 | LOX3 | LOX4 | LOX5 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 8 | 8 | 9 | 7 | 7 | 7 | 8 | 9 | 11 | 9 |
| 2013 | TP | Mean | 8 | 5 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 6 |
| 2004-2012 | TP | Variance | 8 | 10 | 31 | 4 | 4 | 12 | 6 | 30 | 46 | 11 |
| 2013 | TP | Variance | 4 | 1 | 2 | 1 | 4 | 2 | 4 | 1 | 2 | 5 |
| 2004-2012 | TP | 25th Percentile | 7 | 6 | 6 | 6 | 6 | 6 | 6 | 7 | 8 | 7 |
| 2013 | TP | 25th Percentile | 6 | 5 | 6 | 6 | 5 | 5 | 6 | 6 | 6 | 4 |
| 2004-2012 | TP | Median | 8 | 7 | 7 | 7 | 7 | 7 | 7 | 8 | 9 | 8 |
| 2013 | TP | Median | 8 | 6 | 7 | 6 | 6 | 6 | 7 | 6 | 7 | 6 |
| 2004-2012 | TP | 75th Percentile | 9 | 8 | 9 | 8 | 8 | 8 | 9 | 10 | 12 | 9 |
| 2013 | TP | 75th Percentile | 9 | 6 | 8 | 8 | 8 | 7 | 9 | 7 | 8 | 8 |
| 2004-2012 | TP | Count | 78 | 98 | 102 | 89 | 98 | 99 | 97 | 57 | 83 | 61 |
| 2013 | TP | Count | 10 | 10 | 11 | 11 | 11 | 11 | 11 | 7 | 12 | 9 |
| 2004-2012 | TSS | Mean | 3.6 | 3.2 | 4.2 | 3.1 | 3.1 | 3.0 | 3.0 | 3.2 | 3.5 | 5.0 |
| 2013 | TSS | Mean | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Variance | 9.3 | 1.1 | 79.9 | 0.8 | 0.1 | 0.0 | 0.0 | 0.6 | 5.0 | 33.9 |
| 2013 | TSS | Variance | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| 2004-2012 | TSS | 25th Percentile | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | 25th Percentile | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Median | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | Median | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | 75th Percentile | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | 75th Percentile | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Count | 40 | 77 | 102 | 76 | 96 | 97 | 93 | 14 | 59 | 19 |
| 2013 | TSS | Count | 2 | 10 | 11 | 11 | 11 | 11 | 11 | 2 | 11 | 4 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | ALK | Mean | 55 | 14 | 11 | 16 |
| 2013 | ALK | Mean | 40 | 11 | 11 | 13 |
| 2004-2012 | ALK | Variance | 509 | 58 | 14 | 23 |
| 2013 | ALK | Variance | 270 | 2 | 2 | 4 |
| 2004-2012 | ALK | 25th Percentile | 35 | 10 | 8 | 12 |
| 2013 | ALK | 25th Percentile | 31 | 11 | 10 | 12 |
| 2004-2012 | ALK | Median | 51 | 12 | 10 | 15 |
| 2013 | ALK | Median | 39 | 12 | 11 | 14 |
| 2004-2012 | ALK | 75th Percentile | 65 | 15 | 12 | 17 |
| 2013 | ALK | 75th Percentile | 42 | 12 | 12 | 15 |
| 2004-2012 | ALK | Count | 77 | 82 | 88 | 42 |
| 2013 | ALK | Count | 11 | 12 | 12 | 7 |
| 2004-2012 | CA | Mean | 19 | 7 | 6 | 6 |
| 2013 | CA | Mean | 14 | 5 | 5 | 5 |
| 2004-2012 | CA | Variance | 63 | 4 | 3 | 2 |
| 2013 | CA | Variance | 62 | 1 | 1 | 1 |
| 2004-2012 | CA | 25th Percentile | 13 | 5 | 4 | 5 |
| 2013 | CA | 25th Percentile | 10 | 5 | 4 | 4 |
| 2004-2012 | CA | Median | 18 | 6 | 5 | 5 |
| 2013 | CA | Median | 12 | 6 | 5 | 5 |
| 2004-2012 | CA | 75th Percentile | 23 | 8 | 6 | 7 |
| 2013 | CA | 75th Percentile | 16 | 6 | 6 | 5 |
| 2004-2012 | CA | Count | 77 | 82 | 88 | 42 |
| 2013 | CA | Count | 11 | 12 | 12 | 7 |
| 2004-2012 | CL | Mean | 41 | 23 | 22 | 23 |
| 2013 | CL | Mean | 34 | 18 | 19 | 21 |
| 2004-2012 | CL | Variance | 499 | 69 | 77 | 55 |
| 2013 | CL | Variance | 571 | 14 | 20 | 33 |
| 2004-2012 | CL | 25th Percentile | 22 | 16 | 16 | 17 |
| 2013 | CL | 25th Percentile | 18 | 15 | 15 | 16 |
| 2004-2012 | CL | Median | 37 | 22 | 22 | 23 |
| 2013 | CL | Median | 25 | 18 | 19 | 20 |
| 2004-2012 | CL | 75th Percentile | 54 | 28 | 27 | 28 |
| 2013 | CL | 75th Percentile | 42 | 20 | 23 | 25 |
| 2004-2012 | CL | Count | 90 | 92 | 95 | 74 |
| 2013 | CL | Count | 11 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | DCS | Mean | 0.47 | 0.42 | 0.43 | 0.33 |
| 2013 | DCS | Mean | 0.48 | 0.45 | 0.47 | 0.31 |
| 2004-2012 | DCS | Variance | 0.03 | 0.02 | 0.01 | 0.01 |
| 2013 | DCS | Variance | 0.01 | 0.00 | 0.01 | 0.01 |
| 2004-2012 | DCS | 25th Percentile | 0.35 | 0.36 | 0.36 | 0.27 |
| 2013 | DCS | 25th Percentile | 0.42 | 0.40 | 0.43 | 0.29 |
| 2004-2012 | DCS | Median | 0.47 | 0.41 | 0.44 | 0.31 |
| 2013 | DCS | Median | 0.48 | 0.46 | 0.46 | 0.33 |
| 2004-2012 | DCS | 75th Percentile | 0.58 | 0.50 | 0.50 | 0.38 |
| 2013 | DCS | 75th Percentile | 0.54 | 0.49 | 0.51 | 0.37 |
| 2004-2012 | DCS | Count | 63 | 68 | 68 | 56 |
| 2013 | DCS | Count | 11 | 12 | 12 | 13 |
| 2004-2012 | SIO2 | Mean | 8 | 5 | 4 | 3 |
| 2013 | SIO2 | Mean | 6 | 6 | 4 | 4 |
| 2004-2012 | SIO2 | Variance | 29 | 5 | 3 | 3 |
| 2013 | SIO2 | Variance | 48 | 3 | 1 | 2 |
| 2004-2012 | SIO2 | 25th Percentile | 3 | 4 | 3 | 2 |
| 2013 | SIO2 | 25th Percentile | 1 | 5 | 4 | 3 |
| 2004-2012 | SIO2 | Median | 7 | 5 | 3 | 4 |
| 2013 | SIO2 | Median | 3 | 6 | 4 | 3 |
| 2004-2012 | SIO2 | 75th Percentile | 12 | 6 | 5 | 5 |
| 2013 | SIO2 | 75th Percentile | 9 | 7 | 5 | 5 |
| 2004-2012 | SIO2 | Count | 76 | 81 | 87 | 42 |
| 2013 | SIO2 | Count | 11 | 12 | 12 | 7 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | SO4 | Mean | 4.0 | 0.2 | 0.1 | 0.1 |
| 2013 | SO4 | Mean | 2.6 | 0.1 | 0.1 | 0.1 |
| 2004-2012 | SO4 | Variance | 97.9 | 0.0 | 0.0 | 0.0 |
| 2013 | SO4 | Variance | 29.5 | | | |
| 2004-2012 | SO4 | 25th Percentile | 0.5 | 0.1 | 0.1 | 0.1 |
| 2013 | SO4 | 25th Percentile | 0.3 | 0.1 | 0.1 | 0.1 |
| 2004-2012 | SO4 | Median | 1.2 | 0.1 | 0.1 | 0.1 |
| 2013 | SO4 | Median | 0.4 | 0.1 | 0.1 | 0.1 |
| 2004-2012 | SO4 | 75th Percentile | 3.2 | 0.2 | 0.1 | 0.1 |
| 2013 | SO4 | 75th Percentile | 1.9 | 0.1 | 0.1 | 0.1 |
| 2004-2012 | SO4 | Count | 89 | 92 | 96 | 74 |
| 2013 | SO4 | Count | 11 | 12 | 12 | 12 |
| 2004-2012 | TDEPTH | Mean | 0.35 | 0.31 | 0.32 | 0.20 |
| 2013 | TDEPTH | Mean | 0.38 | 0.34 | 0.33 | 0.21 |
| 2004-2012 | TDEPTH | Variance | 0.02 | 0.01 | 0.01 | 0.01 |
| 2013 | TDEPTH | Variance | 0.00 | 0.00 | 0.00 | 0.00 |
| 2004-2012 | TDEPTH | 25th Percentile | 0.25 | 0.22 | 0.25 | 0.13 |
| 2013 | TDEPTH | 25th Percentile | 0.32 | 0.32 | 0.30 | 0.17 |
| 2004-2012 | TDEPTH | Median | 0.34 | 0.31 | 0.33 | 0.19 |
| 2013 | TDEPTH | Median | 0.38 | 0.36 | 0.32 | 0.22 |
| 2004-2012 | TDEPTH | 75th Percentile | 0.47 | 0.39 | 0.38 | 0.25 |
| 2013 | TDEPTH | 75th Percentile | 0.44 | 0.36 | 0.37 | 0.24 |
| 2004-2012 | TDEPTH | Count | 64 | 63 | 64 | 56 |
| 2013 | TDEPTH | Count | 11 | 12 | 12 | 11 |
| 2004-2012 | TDOC | Mean | 55 | 14 | 11 | 16 |
| 2013 | TDOC | Mean | 40 | 11 | 11 | 13 |
| 2004-2012 | TDOC | Variance | 509 | 58 | 14 | 23 |
| 2013 | TDOC | Variance | 270 | 2 | 2 | 4 |
| 2004-2012 | TDOC | 25th Percentile | 35 | 10 | 8 | 12 |
| 2013 | TDOC | 25th Percentile | 31 | 11 | 10 | 12 |
| 2004-2012 | TDOC | Median | 51 | 12 | 10 | 15 |
| 2013 | TDOC | Median | 39 | 12 | 11 | 14 |
| 2004-2012 | TDOC | 75th Percentile | 65 | 15 | 12 | 17 |
| 2013 | TDOC | 75th Percentile | 42 | 12 | 12 | 15 |
| 2004-2012 | TDOC | Count | 77 | 82 | 88 | 42 |
| 2013 | TDOC | Count | 11 | 12 | 12 | 7 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | TDS | Mean | 188 | 104 | 101 | 96 |
| 2013 | TDS | Mean | 130 | 83 | 85 | 98 |
| 2004-2012 | TDS | Variance | 6385 | 1525 | 1376 | 1374 |
| 2013 | TDS | Variance | 7318 | 1136 | 1428 | 199 |
| 2004-2012 | TDS | 25th Percentile | 126 | 74 | 75 | 75 |
| 2013 | TDS | 25th Percentile | 78 | 65 | 70 | 89 |
| 2004-2012 | TDS | Median | 174 | 100 | 100 | 96 |
| 2013 | TDS | Median | 96 | 77 | 87 | 92 |
| 2004-2012 | TDS | 75th Percentile | 230 | 129 | 126 | 114 |
| 2013 | TDS | 75th Percentile | 164 | 103 | 102 | 105 |
| 2004-2012 | TDS | Count | 77 | 80 | 86 | 40 |
| 2013 | TDS | Count | 11 | 12 | 12 | 7 |
| 2004-2012 | TOC | Mean | 19 | 23 | 22 | 19 |
| 2013 | TOC | Mean | 18 | 20 | 21 | 16 |
| 2004-2012 | TOC | Variance | 28 | 28 | 26 | 11 |
| 2013 | TOC | Variance | 7 | 22 | 28 | 8 |
| 2004-2012 | TOC | 25th Percentile | 16 | 19 | 19 | 17 |
| 2013 | TOC | 25th Percentile | 16 | 16 | 17 | 14 |
| 2004-2012 | TOC | Median | 18 | 22 | 21 | 19 |
| 2013 | TOC | Median | 17 | 18 | 18 | 16 |
| 2004-2012 | TOC | 75th Percentile | 22 | 25 | 25 | 21 |
| 2013 | TOC | 75th Percentile | 20 | 23 | 26 | 17 |
| 2004-2012 | TOC | Count | 75 | 82 | 88 | 42 |
| 2013 | TOC | Count | 11 | 12 | 12 | 7 |
| 2004-2012 | DO | Mean | 3.9 | 4.7 | 4.7 | 4.4 |
| 2013 | DO | Mean | 4.1 | 4.8 | 3.8 | 5.0 |
| 2004-2012 | DO | Variance | 3.2 | 4.2 | 4.1 | 3.1 |
| 2013 | DO | Variance | 3.7 | 6.3 | 4.8 | 3.9 |
| 2004-2012 | DO | 25th Percentile | 2.4 | 3.2 | 3.2 | 3.2 |
| 2013 | DO | 25th Percentile | 2.6 | 2.6 | 2.1 | 3.6 |
| 2004-2012 | DO | Median | 3.7 | 4.6 | 4.6 | 4.1 |
| 2013 | DO | Median | 4.2 | 4.9 | 3.8 | 4.8 |
| 2004-2012 | DO | 75th Percentile | 5.0 | 6.0 | 6.1 | 5.4 |
| 2013 | DO | 75th Percentile | 4.7 | 6.3 | 4.5 | 6.4 |
| 2004-2012 | DO | Count | 89 | 90 | 92 | 71 |
| 2013 | DO | Count | 11 | 11 | 11 | 11 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | OPO4 | Mean | 3 | 3 | 3 | 3 |
| 2013 | OPO4 | Mean | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Variance | 1 | 2 | 2 | 2 |
| 2013 | OPO4 | Variance | | | | |
| 2004-2012 | OPO4 | 25th Percentile | 2 | 2 | 2 | 2 |
| 2013 | OPO4 | 25th Percentile | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Median | 2 | 2 | 2 | 2 |
| 2013 | OPO4 | Median | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | 75th Percentile | 4 | 4 | 4 | 3 |
| 2013 | OPO4 | 75th Percentile | 2 | 2 | 2 | 2 |
| 2004-2012 | OPO4 | Count | 75 | 81 | 87 | 40 |
| 2013 | OPO4 | Count | 11 | 12 | 12 | 7 |
| 2004-2012 | PH | Mean | 6.9 | 6.3 | 6.2 | 6.3 |
| 2013 | PH | Mean | 6.6 | 6.3 | 6.2 | 6.4 |
| 2004-2012 | PH | Variance | 0.1 | 0.1 | 0.2 | 0.1 |
| 2013 | PH | Variance | 0.1 | 0.2 | 0.2 | 0.2 |
| 2004-2012 | PH | 25th Percentile | 6.6 | 6.1 | 6.0 | 6.1 |
| 2013 | PH | 25th Percentile | 6.4 | 6.1 | 6.0 | 6.1 |
| 2004-2012 | PH | Median | 6.9 | 6.3 | 6.2 | 6.3 |
| 2013 | PH | Median | 6.6 | 6.5 | 6.2 | 6.3 |
| 2004-2012 | PH | 75th Percentile | 7.1 | 6.4 | 6.4 | 6.5 |
| 2013 | PH | 75th Percentile | 6.8 | 6.6 | 6.4 | 6.6 |
| 2004-2012 | PH | Count | 90 | 93 | 95 | 74 |
| 2013 | PH | Count | 11 | 12 | 12 | 12 |
| 2004-2012 | SPCOND | Mean | 258 | 123 | 115 | 121 |
| 2013 | SPCOND | Mean | 205 | 99 | 105 | 107 |
| 2004-2012 | SPCOND | Variance | 12801 | 1560 | 1614 | 1018 |
| 2013 | SPCOND | Variance | 14147 | 287 | 479 | 944 |
| 2004-2012 | SPCOND | 25th Percentile | 161 | 94 | 89 | 100 |
| 2013 | SPCOND | 25th Percentile | 131 | 94 | 92 | 84 |
| 2004-2012 | SPCOND | Median | 248 | 116 | 107 | 120 |
| 2013 | SPCOND | Median | 166 | 99 | 109 | 104 |
| 2004-2012 | SPCOND | 75th Percentile | 336 | 143 | 140 | 138 |
| 2013 | SPCOND | 75th Percentile | 237 | 104 | 120 | 119 |
| 2004-2012 | SPCOND | Count | 86 | 89 | 90 | 72 |
| 2013 | SPCOND | Count | 11 | 12 | 12 | 12 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | TEMP | Mean | 23 | 24 | 24 | 24 |
| 2013 | TEMP | Mean | 23 | 24 | 24 | 23 |
| 2004-2012 | TEMP | Variance | 24 | 24 | 24 | 28 |
| 2013 | TEMP | Variance | 17 | 18 | 18 | 16 |
| 2004-2012 | TEMP | 25th Percentile | 19 | 20 | 20 | 20 |
| 2013 | TEMP | 25th Percentile | 20 | 22 | 21 | 21 |
| 2004-2012 | TEMP | Median | 23 | 24 | 24 | 25 |
| 2013 | TEMP | Median | 22 | 24 | 24 | 23 |
| 2004-2012 | TEMP | 75th Percentile | 27 | 28 | 28 | 28 |
| 2013 | TEMP | 75th Percentile | 26 | 27 | 27 | 27 |
| 2004-2012 | TEMP | Count | 94 | 98 | 100 | 78 |
| 2013 | TEMP | Count | 11 | 12 | 12 | 12 |
| 2004-2012 | TN | Mean | 1.3 | 1.3 | 1.4 | 1.3 |
| 2013 | TN | Mean | 1.2 | 1.2 | 1.3 | 1.2 |
| 2004-2012 | TN | Variance | 0.3 | 0.1 | 0.1 | 0.1 |
| 2013 | TN | Variance | 0.0 | 0.0 | 0.1 | 0.0 |
| 2004-2012 | TN | 25th Percentile | 1.0 | 1.2 | 1.2 | 1.1 |
| 2013 | TN | 25th Percentile | 1.0 | 1.0 | 1.1 | 1.1 |
| 2004-2012 | TN | Median | 1.2 | 1.2 | 1.3 | 1.3 |
| 2013 | TN | Median | 1.1 | 1.2 | 1.3 | 1.2 |
| 2004-2012 | TN | 75th Percentile | 1.4 | 1.5 | 1.5 | 1.4 |
| 2013 | TN | 75th Percentile | 1.2 | 1.3 | 1.5 | 1.2 |
| 2004-2012 | TN | Count | 72 | 73 | 81 | 37 |
| 2013 | TN | Count | 11 | 9 | 10 | 5 |

| PERIOD | PARAMETER | STATISTIC | LOX6 | LOX7 | LOX8 | LOX9 |
|---|---|---|---|---|---|---|
| 2004-2012 | TP | Mean | 7 | 9 | 10 | 7 |
| 2013 | TP | Mean | 6 | 7 | 8 | 7 |
| 2004-2012 | TP | Variance | 11 | 13 | 27 | 8 |
| 2013 | TP | Variance | 2 | 3 | 3 | 3 |
| 2004-2012 | TP | 25th Percentile | 5 | 7 | 7 | 6 |
| 2013 | TP | 25th Percentile | 5 | 5 | 8 | 6 |
| 2004-2012 | TP | Median | 6 | 8 | 9 | 7 |
| 2013 | TP | Median | 6 | 7 | 8 | 7 |
| 2004-2012 | TP | 75th Percentile | 7 | 9 | 10 | 8 |
| 2013 | TP | 75th Percentile | 7 | 8 | 9 | 8 |
| 2004-2012 | TP | Count | 91 | 95 | 97 | 76 |
| 2013 | TP | Count | 11 | 12 | 12 | 12 |
| 2004-2012 | TSS | Mean | 3.0 | 3.2 | 3.3 | 3.1 |
| 2013 | TSS | Mean | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Variance | 0.1 | 4.9 | 3.1 | 0.9 |
| 2013 | TSS | Variance | 0.0 | 0.0 | 0.0 | 0.0 |
| 2004-2012 | TSS | 25th Percentile | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | 25th Percentile | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Median | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | Median | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | 75th Percentile | 3.0 | 3.0 | 3.0 | 3.0 |
| 2013 | TSS | 75th Percentile | 3.0 | 3.0 | 3.0 | 3.0 |
| 2004-2012 | TSS | Count | 77 | 82 | 88 | 42 |
| 2013 | TSS | Count | 11 | 12 | 12 | 7 |

## APPENDIX B

**Table B-1**. EVPA and LOXA stations classified into zones for analyses.

| | |
|---|---|
| **Canal** | LOXA104, LOXA115, LOXA129, LOXA132, LOXA135 |
| **Perimeter (<2.5 km; <1.6 miles)** | LOX4, LOX6, LOX10, LOX14, LOX15, LOX16, LOXA101, LOXA102, LOXA103, LOXA105, LOXA106, LOXA107, LOXA109, LOXA112, LOXA116, LOXA117, LOXA118, LOXA122, LOXA124, LOXA126, LOXA130, LOXA131, LOXA133, LOXA134, LOXA136, LOXA137, LOXA138, LOXA140 |
| **Transition (2.5 - 4.5 km; 1.6 - 2.8 miles)** | LOX12, LOXA108, LOXA110, LOXA111, LOXA113, LOXA114, LOXA119, LOXA127, LOXA139 |
| **Interior(>4.5 km;> 2.8 miles)** | LOX3, LOX5, LOX7, LOX8, LOX9, LOX11, LOX13, LOXA120, LOXA128 |